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By-Mock, Kathleen Ranlett; Yonge, George
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This study examined the assumption that the meaning of college experience varies for different types of students by determining the relationships between measured personality characteristics and aptitude of students and their persistence at 3 University of California (UC) campuses--Davis, Santa Barbara and Los Angeles. It was hypothesized that the intellectual disposition and academic ability of students were related to their persistence at UC and satisfaction with their experiences there. Information was gathered on freshmen entering in Fall 1965 for 2 years. Data included personality and academic aptitude tests, questionnaires, college achievement and persistence, and interviews. In general, there was not a disproportionate number of average students remaining on the campuses after 2 years (as had been anticipated), although more of those below average left. Academic ability was unrelated to withdrawal in a linear way. Reasons for leaving were related to the types of students. The campus environments were distinct in that different reasons applied to the same types of students at different campuses. Forty percent of all the students had left by Fall 1967. Evidence presented in this report indicates that if administrators and faculty wish to retain the most students possible, particularly those who are highly intellectually oriented, they must more fully accommodate the educational and developmental needs of their students. Extensive tables and copies of the questionnaires document the text. [Not available in hard copy due to marginal legibility of original document]. (JS)

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STUDENTS' INTELLECTUAL ATTITUDES, APTITUDE, AND PERSISTENCE AT THE UNIVERSITY OF CALIFORNIA

By
Kathleen Ranlett Mock and George Yonge

1969

Center for Research and Development
in Higher Education
University of California
Berkeley, California

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UNIVERSITY OF CALIFORNIA, BERKELEY

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I

Introduction

The University of California, as one of the most highly rated universities in the nation, each year enrolls a large number of students superior in ability and in high school achievement. As is true of other colleges and universities in the nation, this university faces a problem of retaining its students. An estimated 40 percent of college students do not complete their education either at the college they originally enter or elsewhere; only 40 percent can be expected to graduate within four years from their original institution (Summerskill, 1962). Knowledgeable persons in the academic community are generally concerned about this loss but particularly about the loss and transfer of students with high potential for intellectual contribution.

The present study examines the assumption that college experiences mean different things to different types of students by ascertaining the relationships between measured personality characteristics and aptitude of college students and their persistence over approximately two years' time at three campuses of the University of California.

Several excellent reviews of the literature on college persistence (Boyer & Michael, 1965; Sexton, 1965; Summerskill, 1962) make it unnecessary to repeat that task here. Therefore, we will refer to only a few studies in which measured aptitude, personality, or both have been related to college persistence in order to provide a general background for the present study.

Before commenting on the results of a number of published studies, it should be noted that most earlier investigations differ essentially in design and problem from the present one. In these earlier studies, persistence is the independent variable; here it is the dependent variable. That is, in our analyses we did not start with identified persisters and nonpersisters and then describe differences between these two groups. Instead, we defined several types of students, and our concerns were focused on the students persisting or withdrawing in different proportions according to these types. A second difference between the other studies and ours is the time at which persisters and nonpersisters were identified. As Sexton (1965) has pointed out, different reasons are associated with the different times of withdrawal--first, second, or third year. Consequently, caution should be used in extrapolating from any four-year studies to this one.

EARLIER FINDINGS

Irrespective of the timing of withdrawal, ability is a fairly consistent but not universal correlate (Daniel, 1967; Darley, 1966; Prediger, 1966; Trent & Medsker, 1968), with fewer students of high ability withdrawing than students of low ability. There are examples, however, where persistence is not related to measured ability. In some colleges (Darley, 1962) there is no relationship between ability and persistence, in a few there is a negative relationship (in which brighter students are more likely to withdraw), and in the majority there is a positive relationship between these two variables. The direction and extent of relationship does not depend on the ability level of the student body. At California Institute of Technology, where all students are of high ability, ability levels were not a correlate of leaving (Heist & Williams, 1960).

The relationships between personality variables and persistence have been found to be much less consistent than the relationship of persistence to ability. For example, with respect to psychological adjustment aspects of personality, Chambers, Berger, and Lieberman (1965), Newman (1965), and Rose and Elton (1966) found dropouts to be more hostile and aggressive than persisters. However, two general reviews of the literature (Sexton, 1965; Williams, 1966) point to minimal or inconsistent relationships between maladjustment, as well as relatively enduring psychological characteristics, and persistence. In a later article, Williams (1967) tried to clarify this somewhat muddled area by considering the relationship between personality characteristics and persistence in various types of environments.

Surprisingly few studies have investigated the relationship between persistence and intellectual, scholarly interests or attitudes. However, dropouts have been characterized as less intellectually oriented in studies by Newman (1965) and Trent and Medsker (1968).

The relationship between high school grades and college success is well substantiated when "success" is defined either in terms of college grade point average (Guisti, 1964; Michael, 1962) or persistence (Ivey, Peterson, & Trebbe, 1966; Stebbins, 1964).

Pervin (1968) has reviewed research dealing with the congruence of perceptions of self and environment and satisfaction with college, and suggests that there is a correlation between the congruence of self and environmental perceptions and satisfaction with an environment. That is, students who used many of the same adjectives to describe their own characteristics and those of their environment were likely to be satisfied in that environment.

HYPOTHESES

Some of the general questions guiding the present research were: What types of students have a satisfactory educational experience at the university to the extent that they persist at the same campus for at least two academic years? What proportion of exceptional students--of high ability and strong intellectual orientation--leave the campus they initially entered? It is hoped that both the possibilities and limitations of the university system will be revealed by focusing on the accommodated *and* unaccommodated members of a university class--that is, those who demonstrate their "fit" with their academic environment by remaining in that milieu and reporting a congruence between their perceptions of their own intellectual needs or goals and what is offered to meet their needs in that situation, versus those who vote against the system either by leaving or demonstrating, or through verbalizing their discontent, or both.

Though the research reported here was exploratory and essentially empirical, several hypotheses were formulated. Earlier research had shown that academic ability was positively related to persistence, and experiences on the California campuses had suggested that an interest in intellectual activities was also a determining factor, but--to the distress of the observers--in an inverse direction. (We had no reason to suppose that one variable was any more important than the other, or that those at the upper end of the intellectual motivation continuum would be any more likely to leave than those at the low end.) This perceived loss of the intellectually motivated students was thought to be connected with an orientation on the part of the university toward the student who could be adequately served by an institution offering large classes and vocational/professional emphasis, and who enjoyed big time athletics, college pranks, and so forth. It was assumed that the intellectually motivated student would perceive such an environment in a negative way. The very students most valued by many professors were thought to be victims of the "multiversity."

In so far as the generally reported (Waller, 1964) positive correlation between college achievement and ability applies to this setting, the high academic standards of the university would result in a positive correlation between academic ability and persistence. That is, those with lesser abilities would have been those dismissed for unacceptable grade point averages--this in spite of a range of ability skewed toward the high end as a result of high entrance requirements. Although the university by state law accepts only those graduating in the top of their high school class (with minor exceptions), the very top students tend to be lured away by some of the prestigious private schools in California or by the Ivy League (Mock, 1967).

Since the focus was on the problems of a particular university, no attempt was made to differentiate transfer students from dropouts. Three campuses out of the multicampus system were chosen, the scope being dictated by limited funding. The particular campuses chosen--Santa Barbara (UCSB), Los Angeles (UCLA), and Davis (UCD)--were believed to be dissimilar environments, thus allowing some intercampus comparisons. Also, the hunches and concerns underlying the study were shared by personnel in those settings. The decision to extend the data-gathering stage over only two rather than four academic years was influenced by funding and by previous research findings which suggested that the anticipated trends should be visible within this time span.

In an attempt to reflect the previous research findings and the noted observations, students were "typed" by academic ability and intellectual motivation. The following relationships were expected:

1. At the University of California, students typed by various levels of academic ability and intellectual motivation transfer or withdraw from their original UC campuses in a nonrandom fashion.
    A. Proportionately more students typed as high on both intellectual motivation and ability, as well as those low on both measures, tend to leave the University of California within the first two years, compared to those average on one or both measures. (The positive correlations between the two instruments to be used as measures of intellectual motivation and ability made the number of students high on one test and low on the other too small to be studied meaningfully.)
    B. Proportionately more students typed as high or low on intellectual motivation, compared to those typed as average, leave before the end of two years; those typed as high and low do not differ from one another in the proportions withdrawing before two years.

C. Proportionately more students typed as low in ability leave, compared with those average and high; proportionately fewer students typed as high ability leave before the end of two years, compared to those of average and low ability.

2. College grades are related to persistence. Students still enrolled after two years have higher grade point averages than those who withdraw. This difference was not presumed to hold for all types of students. For example, for students typed as high on both ability and intellectual motivation, grade point average (GPA) may be unrelated to persistence.

3. The reasons for persistence or withdrawing vary with the type of student.

4. Descriptions of the campus environment and satisfaction with educational experiences are related to type of student.

II

Method

In the fall of 1965, a collaborative project was begun between the Center for Research and Development in Higher Education on the Berkeley campus of the University of California and the student counseling centers on the Davis, Los Angeles, and Santa Barbara campuses of the University. Testing programs under the aegis of the counseling centers provided large samples of entering students for whom personality and aptitude were available: 1,380 students at Davis, 2,169 at Los Angeles, and 2,496 at Santa Barbara. The personality test used in all instances was the Omnibus Personality Inventory (OPI), Form F (Heist & Yonge, 1968). The measures of ability were the Scholastic Aptitude Test (SAT) total scores (College Entrance Examination Board, 1956) at Davis, the Concept Mastery Test (CMT) (Terman, 1956) at Los Angeles, and the School and College Ability Test (SCAT) (Educational Testing Service, 1955) at Santa Barbara. These tested samples represented 73 percent of the 1965 entering freshmen at Davis, 48 percent at Los Angeles, and 93 percent at Santa Barbara. There was no way available to the researchers of easily determining the extent to which students in the study differed from those who did not take the ability test, the personality test, or both.

QUESTIONNAIRE SAMPLES

In spring of 1966, subsamples of freshmen tested at the three UC campuses were given questionnaires asking about their background, attitudes, aspirations, and reactions to UC (see Appendix A). These samples were formed in the following way: Each person tested was assigned to a 3 by 3 matrix according to his score on the academic ability test and his disposition toward intellectuality as derived from his scores on the following OPI scales: Theoretical Orientation (TO), measuring liking for analytical, critical approach to problem solving; Thinking Introversion (TI), measuring a liking for reflective thinking; Estheticism (Es), measuring interest in esthetic matters; Complexity (Co), assessing tolerance of ambiguity; Religious Orientation (RO), measuring degree of religious liberalism; and Autonomy (Au), assessing nonauthoritatian attitudes and need for independence. Questionnaires were sent to those in the extreme cells, that is, high intellectual disposition and high ability, low ability and low intellectual disposition, and high in one and low in the other (all students in cells 1, 3, 7, and 9 in the nine-cell matrix) as well as a 20 percent random sample in each of the remaining five more populous cells. The response rate from all cells was high--91 percent at Davis and Santa Barbara, and 84 percent at Los Angeles. These resulting samples, identified according to cells, are shown in Table 1.

A second followup assessment was conducted during the spring of the following year. At that time, questionnaires again were sent to all those who cooperated in the first-year survey,asking them to evaluate their educational experience (see Appendix B). These followup questionnaire samples of the second year included 1,119 people, representing 79 percent (262) of the first-year responders at Davis, 75 percent (377) at Los Angeles, and 78 percent (480) at Santa Barbara.

A comparison of OPI scores of those who completed only freshman questionnaires with those who completed the sophomore followup questionnaire as well revealed that Davis men who completed both questionnaires averaged higher scores on the Thinking Introversion (TI) scale measuring liking for reflective thought than the men who cooperated only the first year and revealed a less utilitarian orientation on a measure of practical outlook (PO). Also, the men who cooperated both years had scored higher on a dimension of intellectual motivation described later.

The fact that the mean scores for the Davis freshman-only respondents were virtually identical to the mean scores of those who withdrew and that the sophomore respondents had mean scores similar to those who persisted suggests that the cooperating sophomore sample of Davis men was biased in favor of those still at Davis.

Also, the Santa Barbara females completing both questionnaires averaged higher on the Theoretical Orientation (TO) scale, indicating a strong analytical bent, and Response Bias (RB), suggesting a desire to make a good impression in taking the test, than those completing only the freshman questionnaire. But there was no parallel between the average scores of cooperating sophomore females at Santa Barbara and average scores for persisters. This would suggest that the more intellectually interested Santa Barbara female tended to cooperate better regardless of whether she was still at Santa Barbara or at another college. The same comparison of OPI scores at UCLA showed no difference between the freshman-only responders and those who completed the sophomore questionnaire also.

Of the sample originally selected to be in the initial questionnaire survey (100% of students in extreme intellectual disposition and ability cells and 20% in remaining cells), complete data (OPI and ability measures, first- and second-year questionnaires) were available for 72 percent of the Davis group, 63 percent of the UCLA group, and 71 percent of those originally enrolled at Santa Barbara. Although minor biases were apparent in some samples at various phases of the study, the final "complete data" sample did not differ on any OPI scales from the original sample.

INTERVIEW SAMPLES

To add depth and perspective to the survey data, interviews were conducted with selected groups from among the original sample. The first interviews were conducted near the end of the freshman year, with interviewees drawn from the pool of students in certain cells who had responded to the freshman questionnaire. The particular students were either high on ability or intellectual disposition and average on the second dimension, or high on both (cells 1, 2, and 4). We have drawn on the analysis and interpretation of information from those interviews, which has been reported elsewhere (Center for Research and Development in Higher Education, 1966), and from a second set of interviews, restricted to transfer students, conducted the following spring of 1967 (Cherniack & Mock, 1968).

COLLEGE ACADEMIC RECORDS

For each student in the freshman questionnaire sample, a record of achievement and persistence at his original UC campus was provided by the registrar's office. These data include grades for each completed term plus a cumulative grade point average for the last term completed during the course of the study (winter 1966-67 or earlier). For each term, the students were classified according to whether or not they had enrolled and completed the term. Those who did not complete a term were classified, on the basis of registrar's records, into one of the following categories: a) involuntary withdrawal for academic reasons, b) voluntary withdrawal for own reasons, c) involuntary withdrawal for disciplinary reasons, or d) withdrawal for unknown reason.

ANALYSES AND DATA GROUPING

Basic to the subsequent analyses was a grouping in which the tested students were assigned to cells in a 3 by 3 matrix according to scores obtained on the ability and personality tests (Table 2). The criteria for above-average, average, and below-average ability were, respectively, scores above the 85th percentile (of those tested on each campus), between the 16th and 85th percentiles, and below the 16th percentile. In other words, 15 percent of the sample on each campus was assigned to the top group, 70 percent to the middle, and 15 percent to the bottom. The resulting ranges of total scores for high ability on each test were: SAT, 1291-1504; CMT, 96-169; SCAT, 324-399. For average ability the scores were: SAT, 998-1290; CMT, 42-95; SCAT, 305-323. Below average ability scores were: SAT, 719-997; CMT, 0-41; SCAT, 291-304.

The second set of criteria was based on a composite personality dimension derived from scores on the OPI. The dimension--Intellectual Disposition and the various categories (IDC)--is based on the scores on four "primary" scales (Thinking Introversion, TI; Theoretical Orientation, TO; Estheticism, Es; and Complexity, Co) and two "secondary" scales (Autonomy, Au, and Religious Orientation, RO). As explained in the _Omnibus Personality Inventory Manual_,

> The user of the OPI probably should be reminded here that the characteristics measured in the first four scales were included in this system of classification because they served as strong correlates of a general intellectual orientation. Among these four dimensions, greater weight is given to TI and TO than to Es and Co in calculating the respective category assignments. . .Scores on Au and RO serve as secondary criteria, or as conditional variables, with one or the other scale possibly modifying by one unit the category indicated by scores on the first four scales. The assumption underlying the inclusion of these fifth and sixth scales is that an expressed interest in intellectual involvement may be severely attenuated or restricted by authoritarian thinking or by the lack of freedom to think independently /pp. 23-24/.

The specific standard score criteria used to classify profile patterns into the Intellectual Disposition Categories are presented in Appendix D. High scorers on the intellectual dimension (IDC 1-3) are characterized as being favorably disposed to abstract, original, and reflective thinking, enjoying novel and complex experiences, and exhibiting a generally non-authoritarian style of life. Low scorers (IDC 7-8) are more likely to evaluate ideas or facts on the basis of their practical, immediate application rather than for their abstract or theoretical interest; they seek simple and unambiguous experiences, and generally are authoritarian or anti-intellectual in their thinking.

Several other groupings, or typings, of students were involved in the analyses. The most frequently used, referred to as IDC-ability groups or types, involved combining some cells in the 3 by 3 matrix and eliminating others. These were used in analyses concerned with students who were high on both dimensions, low on both, or average on the measures. Consequently, one group consisted of those who had tested as high on both dimensions (cell 1), and a second group consisted of those low on both (cell 9). Due to the positive correlation between ability and intellectual disposition, few subjects fell in cells 3 and 7, involving opposite ends of the variables, thus these cells were eliminated. A third group was composed of the populous cell 5 in which individuals had received an average score on both dimensions. The remaining cells in which scores were average on one dimension and high or low on the other (2, 4, 6, and 8) were combined to form the fourth type. The other typings which were used involved examining one variable at a time, ignoring the second variable, and forming three types defined as high, medium, or low on the variable being examined. The last typing used the 3 by 3 matrix, considering each of the nine cells a separate "type."

The data also were viewed from the standpoint of persistence at the original UC campus. However, two factors must be taken into account in the persistence groupings: 1) The study terminated at the end of the second year, two years before the class would be expected to graduate. 2) On the quarter system (the class under study began on the semester system but was changed to the quarter system for the sophomore year), there is less reason to confine the traditional several months of school vacation to the summer. Under these circumstances, designating students as persisters or nonpersisters only on the basis of their enrollment (enrolled-not enrolled) at an arbitrary time seemed less than satisfactory. A system for classifying student persistence was devised which also took into account the number of terms completed out of the total possible during the course of this project. Students were considered persisters if they completed at least one and one-half academic years, missing only one quarter or one semester of the two semesters and three quarters they were followed, and if they were on campus in the last term of the study (spring quarter 1967). Nonpersisters are described as students who completed a year and one quarter or less but who were not enrolled the last *two* terms of the study, that is, spring and winter quarters 1966-67. (The few students who completed one year and one quarter or less, but who were enrolled the last term, or who completed at least a year and a half but who were not enrolled the last term were not included in analyses based on persistence.) Using this system, most students could be classified as persisters or nonpersisters with considerable confidence.

The chi square statistic was used to test the significance of the difference between frequencies. The .05 level of significance was chosen in the present study. For tables with cell frequencies below those suitable for the chi square technique, the hypogeometric probability distribution was used to check the probability of obtaining such a matrix by chance (Owen, 1962). For those results which reached the .05 level, *post hoc* analyses were performed.

The differences between means of OPI scores, grade point averages, and so forth were tested for significance using large sample multiple comparisons based on a chi square analog of Scheffé's Theorem (Marascuilo, 1966).

Table 1

Freshman Questionnaire Respondents Grouped by Academic Ability, IDC, Campus, and Sex

	Ability											
IDC	Above Average			Average			Below Average			All Abilities		
	UCD	UCLA	UCSB	UCD	UCLA	UCSB	UCD	UCLA	UCSB	UCD	UCLA	UCSB
	Cell 1			Cell 2			Cell 3					
High (1-3)												
Male	19	52	43	9	14	7	1	0	1	29	66	51
Female	14	35	18	8	13	15	7	7	8	29	55	41
Total	33	87	61	17	27	22	8	7	9	58	121	92
	Cell 4			Cell 5			Cell 6					
Medium (4-6)												
Male	21	22	26	53	87	94	10	17	6	84	126	126
Female	9	12	27	74	99	146	18	23	35	101	134	208
Total	30	34	53	127	186	240	28	40	41	185	260	334
	Cell 7			Cell 8			Cell 9					
Low (7-8)												
Male	10	3	26	16	18	25	15	32	22	41	53	73
Female	3	12	9	11	15	34	34	41	71	48	68	114
Total	13	15	35	27	33	59	49	73	93	89	121	187
							Totals					
All IDC												
Male	50	77	95	78	119	126	26	49	29	154	245	250
Female	26	59	54	93	127	195	59	71	114	178	257	363
Total	76	136	149	171	246	321	85	120	143	332	502	613

Table 2

Frequencies of Tested Sample in Academic Ability and

Intellectual Disposition Cells, by Campus and Sex

	Ability											
	Above Average			Average			Below Average			All Abilities		
IDC	UCD	UCLA	UCSB	UCD	UCLA	UCSB	UCD	UCLA	UCSB	UCD	UCLA	UCSB
	Cell 1			Cell 2			Cell 3					
High (1-3)												
Male	20	58	46	36	82	46	1	2	2	57	142	94
Female	15	38	24	49	89	72	7	7	8	71	134	104
Total	35	96	70	85	171	118	8	9	10	128	276	198
	Cell 4			Cell 5			Cell 6					
Medium (4-6)												
Male	104	112	157	345	554	574	52	95	57	501	761	788
Female	58	88	122	373	575	738	99	137	190	530	800	1050
Total	162	200	279	718	1129	1312	151	232	247	1031	1561	1838
	Cell 7			Cell 8			Cell 9					
Low (7-8)												
Male	10	4	29	75	117	154	18	41	25	103	162	208
Female	3	14	9	77	107	165	38	49	78	118	170	252
Total	13	18	38	152	224	319	56	90	103	221	332	460
					Totals							
All IDC												
Male	134	174	232	456	753	774	71	138	84	661	1065	1090
Female	76	140	155	499	771	975	144	193	276	719	1104	1406
Total	210	314	387	955	1524	1749	215	331	360	1380	2169	2496

III

The Entering Freshmen

The freshman questionnaire yielded considerable data which were used to characterize the entering students.

BACKGROUND

The backgrounds of these University of California students in the total sample of the three campuses were found to be similar in many ways (Mock, Yonge, & Heist, 1966). In general, most entering students (91%) graduated from California high schools--usually with medium to large enrollments. In line with expectations, females had achieved slightly higher grades than the males; the UCLA females had higher grades in their secondary records than students on the other two campuses. The high average grades reflect the admissions standards at the University of California. In addition, the higher grades of the UCLA females on the average, compared to females on the other campuses, might be a reflection of their socioeconomic status. The level of income for UCLA parents was lower than that for the other schools. It was noted earlier that many of California's best high school students are attracted to prestigious private colleges or universities in California and to Ivy League schools. UCLA has a sizable commuter population, and the UCLA students interviewed stressed the convenience and low cost of the campus. Apparently, this urban campus, in contrast to the others, attracts high achievers who are unable to afford the private schools.

The fathers of most of the students were employed in the higher level, white collar professional or technical positions (35%), or as managers, officials, or proprietors (34%) (Table 3). This is compared with a statewide sample of seniors in public and private high schools in California, in which approximately 17 and 22 percent of the fathers were in the two highest occupational categories, respectively (Tillery, 1966).

More than a third of the students' mothers were employed. Few came from families with incomes of less than $4,000 per year, and close to half reported a family income of more than $12,000. Thus we assumed that most of these students came from relatively affluent homes in which physical wants are met, and higher education is valued and encouraged, and probably expected.

The religious background of approximately 40 percent of the total sample was Protestant, but proportions at UCLA were lower than at Davis and Santa Barbara. Students were more likely to describe themselves as agnostic or nonreligious (Table 4) than they were to describe their parents in this way. They also classified themselves more liberal politically than they rated their parents (Table 5).

While for the most part the university students at these three campuses were fairly homogeneous in background, the results shown in the tables just mentioned indicate some interesting and important differences among the several campuses. For example, UCLA students graduated from larger high school classes, had parents with less education and lower annual incomes, and came in higher proportion from Jewish homes than did students at the other two campuses. Among UCLA students whose fathers were in professional or technical jobs, fewer of these fathers were employed in a "general culture" profession than fathers of students at other campuses. This category, based on Anne Roe's classification (1956), included clergymen, elementary and secondary teachers, lawyers, etc. More UCLA than UCD fathers were employed in technical jobs. This is another reflection of UCLA's location in a large, urban area--unlike Santa Barbara and Davis.

The UCSB students came from higher income families than did their peers at the other campuses. Related to the income level, proportionately more professionally employed UCSB mothers, in comparison to Davis mothers, were members of a "general culture" profession. Although from higher income families, high school class rank was lower for students at Santa Barbara than those at UCLA

The UCD students graduated from smaller high school classes than their peers on the other campuses. In line with smaller classes, the students came from smaller schools and communities, but their fathers had more education than the fathers of students at UCLA, and their mothers had more education than mothers of students at either of the other campuses. Both Davis parents were employed in one of the "science" professions more frequently than was the case at Santa Barbara.

ABILITY AND ORIENTATION TOWARD LEARNING

The freshman sample tended toward homogeneity across the campuses on measures of ability and orientation toward learning. The significant differences which occurred were slight enough to preclude generalizations about a unique character of the entering student group on each campus.

Table 6 shows the mean ability scores received by the students on each campus, converted to a common metric for purposes of comparison. While the campuses were not different from each other in this regard, the students did set themselves off from the average college students across the country in that the freshman norms for the School and College Ability Test (SCAT) indicate that the UC scores fall within the 68th to 93rd percentiles (Educational Testing Service, 1957; also see Darley, 1962).

A common observation concerning sex differences is borne out by the data--though the admission requirements are the same across the sexes, the females had higher achievement records in high school, as noted earlier, but lower ability scores--a discrepancy usually accounted for by motivational factors. That is, adolescent girls generally are described as more serious about their schoolwork.

At each campus and for both sexes there was a moderate connection between measured ability and IDC classification (see Table 7). Generally, the more committed and oriented to the world of ideas, the higher the average ability score (correlations ranged from -.37 for UCSB males to -.65 for UCLA males). To the extent that some students express more interest than others in scholarly pursuits, there is a corresponding tendency for them to show more ability for engaging in such activites. Scores were converted to the same metric, in order to see whether students falling in a given IDC category but attending different campuses were of comparable ability. The average ability level for each IDC category was roughly comparable across campuses, with differences being reasonably attributable to discrepancies inherent in the process of converting scores from one metric to another.

However, selecting students for special learning experiences solely on the basis of either ability or intellectual orientation would result in the inclusion of some students who were not at the requisite level of the other variable. There are qualitative differences in learners with the same intellectual orientation but differing in ability, just as there are qualitative differences in learners with the same ability level but with different orientations.

PERSONALITY CHARACTERISTICS

In personality characteristics, the total sample differed from some of the OPI normative means, especially in having a more liberal religious orientation (RO) and more self-reliance (Au). The total sample also were less apt to characterize themselves as socially alienated, averaging significantly above the norm score on a measure of personal integration (PI).

Several significant differences between schools were found on OPI scales. However, while statistically reliable, the actual psychological differences implied are slight. For instance, UCLA men scored two standard score points higher on a scale of test-taking attitude (RB), appearing more disposed to make a good impression, than did men at Davis and Santa Barbara (Table 8). Compared to their male peers on the other two campuses, the Los Angeles men were also characterized more by liking for reflective thought and academic activities (TI), sensitivity to esthetic stimulation (Es), and skepticism of conventional religious beliefs (RO).

Compared to UCSB men, UCLA men were more tolerant of ambiguity (Co), and less interested in practical results (PO). UCLA men described themselves as more tense (AL) than did Davis men.

Davis men appeared less impulsive (IE) and more concerned for the welfare of others (Am) than men at the other two campuses, and they enjoyed reflective thought and academic activities (TI) more than UCSB men.

The women at Los Angeles were more impulsive than were women at the other schools and more skeptical toward conventional religious beliefs (RO). Compared to Davis women, they were more reflective (TI), and their esthetic sensitivity (Es) and tolerance of ambiguity (Co) were more pronounced than was true of Santa Barbara women.

Santa Barbara women were lower than their female peers on the other two campuses in their preference for dealing with theoretical problems (TO), and were less anxious to make a good impression in their attitude toward test taking (RB), and showed stronger inclination to socialize and greater emotionality (MF). UCSB women also admitted to more attitudes characterizing the socially alienated (PI) than did Davis women.

The tendencies noted in average OPI scores were paralleled in IDC, again with the differences being slight. The UCLA men were classified as above average in IDC more frequently than men at UCSB and UCD. This difference also appeared for women at UCLA in relation to those at UCSB.

With respect to the IDC-ability distribution, two campus differences were significant. UCLA men were more frequently of high IDC with average-ability scores and less frequently of low IDC with high-ability scores than men at the other campuses. UCSB men tended more frequently to be in the low-IDC high-ability cell. The same differences held for the UCLA and UCSB women in the sample, but to a smaller degree (Table 9).

CHOICE OF CAMPUS

Although most of the sampled freshmen were at the college of their first choice, 20 percent of the UCLA students and 20 percent of UCD men would have preferred to attend some other college, in most cases, UC Berkeley. More than one-third of the total sample listed Berkeley as either first or second choice. UC at Irvine, Riverside, and San Diego, on the other hand, were seldom chosen. Of the three campuses studied, UCLA had the highest proportion of freshmen planning to remain on the same campus for the next few years (Table 10).

When asked to note reasons for choice of campus, the largest proportion of students chose academic reputation. UCLA students chose "curriculum" and "closeness to home" as the next two most important reasons for attending that campus. (Not only is the entire three-campus sample largely from secondary schools in California, but at the metropolitan UCLA campus, the majority graduated from schools in the Los Angeles area. Less than a quarter of the UCLA students came from further away than Anaheim or Lompoc; see Table 11.) At UCSB, "location and climate" ranked second, and "curriculum" and "chance to get away from home" tied for third. Curriculum and "size" (presumably small size, at least in the UC context) were considered important by those students who chose to attend UCD.

More than four-fifths of the students were sure or fairly sure that they made the best decision in their choice of campus. At Santa Barbara, low-IDC males seemed to be more satisfied with their decision than were high-IDC males; larger percentages of Davis males seemed to be satisfied with their choice of campus than the other sex or campus groups.

ASPIRATIONS AND GOALS

Of the six educational goals students were asked to rate, the largest percentages of students on all three campuses considered as "very important" "increasing one's understanding of people with backgrounds and/or values different from one's own" and "exposure to ideas which would result in a more comprehensive world view." The three activities chosen by the largest percentages of students as "important" for personal satisfaction in college included general course work, course work in one's major, and self-discovery and self-insight. Individual study and research was important to larger percentages of students at UCLA than to students at UCSB.

Academic ability and intellectual disposition were related to the rating of the importance of various goals and activities (Tables 12, 13). Not surprisingly, there was a positive relationship between IDC and breadth of interest. More low-IDC individuals than their high-IDC peers appeared to be primarily interested in the practical matter of courses related to their vocational interests; on the other hand, high-IDC people were more likely to endorse the importance of "exposure to the best thinking of the ages," being "challenged to critically re-examine basic beliefs," and furthering their appreciation of their "cultural and esthetic heritage."

Across the total sample, proportionately more students said they had come to college to get a general education (64%) than said they were there for vocational training (36%), and higher percentages of women than men stated this. Consistent with earlier stated findings, high-IDC men were less likely to be vocationally oriented (Table 14) than low-IDC men. (Women in all IDC cells were more interested in general education than vocational preparation.)

It was found that the academic goals students held and how they preferred their education to be structured were related to the propensity to become political activists (reported in detail in Mock, 1968; also see Heist, 1966).

Across the entire sample, the largest percentages of students were planning on majoring in the social sciences (40%), humanities (17%), and physical sciences (16%). When the distributions of the IDC and ability categories across the majors were examined (Table 15), tendencies were noted for larger percentages of low than high individuals (on both the ability and IDC classifications) to be in the social sciences, and more high than low in the humanities. That is, proportionately more high-IDC people than low-IDC people are in the humanities, whereas proportionately more low-IDC people than high are in the social sciences.

Appendix E gives IDC and ability information separately for each major, as well as the mean scores of the OPI scales for each major.

More males than females planned to continue their education beyond the master's degree. Intellectual disposition and ability were related to the educational plans of the students. In general, the high-ability and high-IDC students planned on obtaining advanced degrees in greater percentages than did low-ability and low-IDC students.

Table 3

Percentages of Freshmen Classified According to Occupation of Father[a]

Occupation	Male			Female			Total
	UCD	UCLA	UCSB	UCD	UCLA	UCSB	
Professional, technical, and kindred	32	33	35	39	33	35	35
Managers, officials, and proprietors, farm owners and managers	34	28	33	37	33	39	34
Sales workers	7	13	11	3	10	9	9
Craftsmen, foremen, kindred	10	11	6	5	8	3	7
Military service	5	2	4	5	4	5	4
Clerical and kindred	5	3	4	3	3	3	3
Operations and kindred, apprentices	1	4	2	4	5	2	3
Service workers, including private household	1	2	4	2	1	2	2
Laborers, including farm and mine	3	0	0	1	2	1	1
Never employed	0	0	0	0	0	0	0

[a] Based on U. S. Census categories.

Table 4

Percentages of Freshmen Endorsing Various Religious Faiths

by Campus and Sex

Religion	UCD		UCLA		UCSB		Total
	M	F	M	F	M	F	
Protestant	37	50	31	26	36	51	39
Catholic	19	15	10	19	14	14	15
Jewish	3	3	22	23	7	6	11
Agnostic	8	11	18	14	19	11	14
Atheist	6	4	5	3	4	2	4
No religion	14	12	11	12	13	13	12

Table 5

Political Descriptions of Self, Father, and Mother by Freshmen by Campus and Sex, in Percentages

Politics	UCD		UCLA		UCSB	
	M	F	M	F	M	F
Very liberal or liberal						
Self	37	33	39	44	31	31
Father	21	13	27	28	19	20
Mother	19	12	23	27	19	19
Moderate						
Self	30	31	28	31	35	36
Father	32	31	37	33	36	36
Mother	35	39	36	35	38	38
Conservative or very conservative						
Self	23	22	24	12	20	17
Father	38	40	25	28	33	34
Mother	34	34	26	25	29	32

Table 6

Mean Scores of Entering Freshmen, Fall 1965, on SCAT, by Campus and Sex

	UCD	UCLA	UCSB
Male	313[a]	311[b]	317
Female	309[a]	307[b]	312

[a] Converted from SAT, using table in Darley, J. G., Promise and Performance. Berkeley: Center for the Study of Higher Education, 1962.

[b] Converted to American Council on Education Psychological Examination using data from Lois Langland, and from ACE to SCAT using Darley tables.

Table 7

Mean Scores of Freshmen on School and College Ability Test, by Intellectual Disposition Level, Campus, and Sex

IDC	UCD[a]		UCLA[a]		UCSB	
	M	F	M	F	M	F
Above average						
2	323	314	323	319	324	319
3	316	313	318	314	322	316
Average						
4	316	312	313	313	319	315
5	314	309	311	309	317	314
6	310	308	307	305	315	310
Below average						
7	309	305	304	305	315	310
8	307	305	305	303	314	308
Total	313	309	311	307	317	312

[a] Scores converted to SCAT equivalents.

Table 8

Raw Score Means and Standard Deviations on Omnibus Personality Inventory (Form F) Scales for Freshmen, Fall 1965, by Campus and Sex

Campus	TI	TO	Es	Co	Au	RO	SE	IE	PI	AL	Am	PO	MF	RB
							MALE							
UCD (N=661)														
Mean	23.1	21.1	9.9	15.2	26.9	14.7	21.9	30.2	34.0	13.9	19.7	14.0	34.3	13.4
SD	7.0	4.9	4.8	5.0	6.7	5.2	7.2	9.8	10.0	4.1	5.7	5.1	5.5	3.9
UCLA (N=1064)														
Mean	24.8	21.2	10.7	15.4	26.9	15.3	21.9	31.7	33.8	13.2	18.9	13.9	33.7	14.1
SD	7.9	5.3	5.2	5.4	7.2	5.8	7.5	9.8	10.2	4.5	5.9	5.6	5.8	4.4
UCSB (N=1090)														
Mean	23.5	20.5	10.0	14.7	26.5	14.3	21.9	32.2	33.5	13.6	18.7	14.5	33.8	12.9
SD	7.5	5.2	4.8	5.1	6.6	5.6	7.5	10.3	10.6	4.2	5.7	5.1	5.6	4.1
							FEMALE							
UCD (N=721)														
Mean	24.9	18.1	13.3	14.9	26.2	13.3	23.5	24.8	33.6	13.5	23.3	12.8	24.8	12.9
SD	7.3	5.3	4.6	5.4	7.1	5.2	6.9	10.2	10.2	4.2	5.3	5.1	5.4	4.1
UCLA (N=1103)														
Mean	25.7	17.8	13.9	15.2	26.6	13.9	23.8	26.6	33.1	12.9	22.8	12.8	24.5	13.2
SD	7.6	5.4	4.7	5.5	6.9	5.7	7.1	9.9	9.8	4.3	5.1	4.9	5.4	4.2
UCSB (N=1406)														
Mean	25.2	17.3	13.3	14.5	26.1	13.0	23.7	25.9	32.9	13.1	23.0	13.3	24.0	12.4
SD	7.2	5.1	4.7	5.4	6.8	5.3	7.0	9.7	10.6	4.2	5.4	4.7	5.2	4.0

Table 9

Percentages of Freshmen Tested in Ability and Intellectual Disposition Cells, by Campus and Sex

Cell	Male*			Female*		
	UCD	UCLA	UCSB	UCD	UCLA	UCSB
High ability, high IDC (Cell 1)	3	5	4	2	3	2
High ability, average IDC (Cell 2)	5	8	4	7	8	5
High ability, low IDC (Cell 3)	0	0	0	1	1	1
Average ability, high IDC (Cell 4)	16	11	14	8	8	9
Average ability, average IDC (Cell 5)	52	51	53	52	52	53
Average ability, low IDC (Cell 6)	8	9	5	14	12	14
Low ability, high IDC (Cell 7)	2	0	3	1	1	1
Low ability, average IDC (Cell 8)	11	11	14	11	10	12
Low ability, low IDC (Cell 9)	3	4	2	5	4	6
Frequencies	661	1065	1090	722	1104	1406

*Significant at .01 level.

Table 10

Percentages of Students Endorsing Various Educational Plans for the Next Few Years, by Ability, Campus, and Sex

	High ability						Low ability					
	UCD		UCLA		UCSB		UCD		UCLA		UCSB	
Plan	M	F	M	F	M	F	M	F	M	F	M	F
Remain on this campus	68	65	79	76	66	65	77	53	82	76	52	59
Transfer to another UC campus	16	19	9	15	12	18	8	20	4	7	28	17
Transfer to another college or university	10	8	8	4	13	15	11	24	14	16	7	20
Drop out before completing four years	0	8	3	5	6	2	4	3	0	1	0	2

Note--Percentages do not add to 100 due to individuals who did not answer the ite

Table 11

Percentages of Students Graduating from Secondary Schools in Various Parts of California, by Campus and Sex

	Male			Female		
Area of California	UCD	UCLA	UCSB	UCD	UCLA	UCSB
Southern border to Huntington Beach, including San Diego	1	5	7	2	6	8
Anaheim to Lompoc, including Los Angeles and Santa Barbara	4	76	52	5	76	51
Bakersfield to King City	1	2	2	2	1	2
Fresno to Benicia, including San Francisco	51	5	28	56	7	25
Placerville to Fort Bragg, including Sacramento	36	1	3	26	1	3
Red Bluff to Fortuna	4	0	1	2	0	0
Eureka to northern border	1	0	0	3	0	0
Outside California	2	11	7	4	9	11

Table 12

Percentages of Students Rating Various Activities as "Very Important for Personal Satisfaction in College," by Intellectual Disposition, Campus, and Sex

Item	High IDC (cells 1-3)						Low IDC (cells 7-8)					
	UCD		UCLA		UCSB		UCD		UCLA		UCSB	
	M	F	M	F	M	F	M	F	M	F	M	F
Self-discovery, self-insight	76	97	77	87	82	93	32	77	38	71	45	66
Individual, artistic, or literary work	41	59	33	58	37	59	0	10	4	9	7	4
Student "bull-sessions"	52	48	26	35	27	41	20	33	13	15	10	28
Faculty acquaintance	14	21	15	24	20	27	7	15	4	6	10	15
Individual study	52	62	62	65	59	73	32	25	34	29	29	25
Course work in general	41	41	42	31	24	27	34	46	32	43	25	44
Course work in major	76	72	70	84	63	80	88	79	85	81	78	89
Parties, social life	7	10	8	13	6	12	15	25	19	29	21	16
Athletics	3	10	9	5	4	2	5	8	23	12	12	9
Student government	3	7	6	5	4	10	0	8	6	1	1	8

Table 13

Percentages of Freshmen Considering Various Goals "Very Important" in College, by Academic Ability, Campus, and Sex

Goal	High ability (upper 15%)						Low ability (lower 15%)					
	UCD		UCLA		UCSB		UCD		UCLA		UCSB	
	M	F	M	F	M	F	M	F	M	F	M	F
Further appreciation of cultural and esthetic heritage	34	38	53	64	32	43	15	37	16	34	21	46
Increased understanding of people of different backgrounds and/or values	42	69	58	78	47	61	31	59	37	72	38	68
Exposure to the best thinking of the ages	32	54	57	68	44	46	31	44	39	48	21	46
Exposure to ideas which will result in a more comprehensive world view	52	85	64	78	51	63	35	68	45	65	52	75
Critical reexamination of basic beliefs	52	65	52	71	58	59	31	37	24	38	21	39
Development of a scientific approach to problem solving	44	23	34	27	29	11	31	8	29	11	28	7

Table 14

Percentages of Freshmen Endorsing Vocational or General Education as the Main Purpose of College, by Intellectual Disposition, Campus, and Sex

Purpose	Male			Female		
	High	Medium	Low	High	Medium	Low
Vocational preparation[a]						
UCD	31	54	56	27	31	42
UCLA	18	52	66	9	34	41
UCSB	24	43	56	24	18	30
General education[b]						
UCD	69	46	44	72	68	58
UCLA	80	47	32	86	66	59
UCSB	72	55	44	76	82	70

Note--Percentages do not total 100 because some did not answer.

[a] Included individuals endorsing either: "The main purpose of my education is to prepare me for vocational success and other courses are largely a waste of time," or "I want college to prepare me for a job, primarily, but I also injoy taking some elective courses just for general interest."

[b] Included those endorsing either: "I mainly want a good general education and will worry about the job or further training later on," or "Preparation for a job is part of my reason for being in college, but I want mostly to enjoy the kind of life an education brings."

Table 15

Distribution of Freshmen Across Academic Majors Within Levels of Intellectual Disposition and Academic Ability

Major	IDC						Ability					
	High		Average		Low		High		Average		Low	
	N	%	N	%	N	%	N	%	N	%	N	%
Engineering	7	3	26	3	15	4	15	4	29	4	4	1
Physical sciences	42	15	134	17	58	15	69	19	120	16	50	14
Biological sciences	24	9	77	10	28	7	35	10	76	10	18	5
Social sciences	97	36	309	40	179	45	117	32	278	37	173	50
Humanities	65	24	122	16	52	13	85	24	127	17	44	13
Fine arts	22	8	48	6	14	3	14	4	49	7	21	6
Agriculture	1	0	22	3	23	6	4	1	22	3	20	6
Undecided	13	5	41	5	28	7	22	6	42	6	18	5
Total	271	100	779	100	397	100	361	100	738	100	348	100

IV

Holding Power of the University

Before presenting data bearing explicitly on the various research questions used to organize the data of the study, we will present data on differences in the proportions of students withdrawing according to school and sex as of spring of 1966-67 and as of fall quarter of 1967-68 irrespective of ability or intellectual motivation (IDC) level. Data on the withdrawal pattern across schools and sexes will also be presented.

WITHDRAWAL PATTERNS

As of the spring 1966-67 cutoff date, 31 percent of the total sample had withdrawn from their original campus. There was no significant difference in the percentages of men and women withdrawing, nor was there a difference among campuses. As may be seen from Table 16, the range of percentages withdrawing is from a low of 27 (Davis males) to a high of 36 (Santa Barbara females). Analyses discussed in the first part of this section are based on various combinations of the groups presented in Table 16.

As of the fall 1967-68 cutoff date, clear differences emerged among schools and sexes. At this point, 41 percent of the total sample were classified as withdrawals. There was a significant relationship between campus and the percentage withdrawing (chi square = 11.35, df = 2). Specifically, a smaller percentage of UCLA students (35%) had withdrawn, compared to the overall incidence of 41 percent. In addition there was a reliable difference between the overall percentage of men (36%) and women (45%)

withdrawing (chi square = 11.10, df = 1). However, it must be quickly noted that there was neither a sex nor a campus difference per se. That is, an analysis of the six groups presented in Table 16 (defined by campus and sex) reveals, as might be expected from the already noted sex and campus differences, significant intracategory variability in percentages withdrawing (chi square = 25.19, df = 5). The groups deviating most from the overall withdrawal rate are Davis women (49%) and Santa Barbara women (48%), and UCLA men (34%). From this analysis it becomes apparent that the previously reported difference in campuses (proportionately fewer Los Angeles students withdrawing) primarily reflects the high incidence of withdrawal of Davis and Santa Barbara women. That is, there was no significant difference among men from campus to campus but there was among women. By the same token, "high incidence" of female withdrawals at Davis and Santa Barbara may have accounted for the sex differences noted earlier.

To reverse our perspective for a moment and view these results in terms of the holding power of the three campuses, we may say that with regard to men all three campuses exerted about equal holding power, but for women Los Angeles has a greater holding power than either Davis or Santa Barbara. The reasons for this difference are not clear.

Since no differences emerged prior to the fall 1967 cutoff date, perhaps the pattern of withdrawal(time at which withdrawing students left their original campus) may differ meaningfully from one campus to another, according to sex and type of student. The analyses of withdrawal pattern will compare the students who withdrew between their initial date of enrollment (fall 1965) and the spring of 1967 and those who withdrew between the spring and fall of 1967. This definition of pattern does not have a psychological base and was dictated by the manner in which the data were collected. The withdrawal pattern data on which the sex and campus analyses are based may be found in Table 16.

Of the total sample of students who withdrew, 24 percent did so between the spring and fall quarters of 1967. Significant differences were observed among campuses in withdrawal pattern (chi square = 20.85, df = 2).

Proportionately more Davis students (35%) who withdrew did so between the spring and fall,while fewer Los Angeles students (13%) withdrew during this period. There was also a moderate sex difference (chi square = 4.58, df = 1) in withdrawal pattern across schools, with the men who withdrew less likely to have done so later, between the spring and fall (18%) than was true of the women (28%).

As with our previous analyses, fall status, campus, and sex differences are in need of qualification. An analysis of withdrawal patterns across all six groups (sex and campus) presented in Table 16 indicated reliable differences (chi square = 27.91, df = 5). More Davis men (34%) and women (36%) and fewer Los Angeles men (2%) withdrew between the spring and fall. Thus, Davis students who withdrew did so later than students who withdrew from the other campuses, and only the Los Angeles men tended to withdraw early. The campus difference in withdrawal pattern attributed above to Los Angeles, then, holds only for the men. Furthermore, the tendency for Los Angeles men to withdraw early may be invoked to account for the sex differences noted across campuses. That is, there was no sex difference per se, but only a sex difference in withdrawal pattern at Los Angeles. For some reason, Davis held more of its eventually withdrawing students longer than the other campuses, while more of the Los Angeles men who withdrew during the first two years did so earlier than was true of students at the other campuses.

CAMPUS DIFFERENCES IN WITHDRAWAL PATTERNS

Studying campus differences according to student type might shed some light on the pattern of withdrawal. We considered what type (according to ability and intellectual motivation) of withdrawing student at Davis might tend to remain longer. Did the early withdrawing Los Angeles male represent a particular type of student who also withdrew early at the other campuses? It should be noted that between-campus comparisons which involve a classification by level of ability are made very cautiously and tentatively because different measures of ability were used at each of the three campuses. However, this limitation may not be as serious as it first appears. Scores of the three tests converted to a common metric indicate similar distributions of ability at the three campuses. Further, a fixed proportion of a given student body was used to define ability level (top 15% was defined as high), and no comparison was attempted on the basis of individual scores across campuses.

A significant relationship appeared between campus and pattern of withdrawal for students of high ability (chi square for men = 17.44, df = 2; chi square for women = 29.03, df = 2). In these analyses, we note that 56 percent of the Davis men of high ability and 69 percent of the Davis women of high ability who withdrew did so between the spring and fall (Table 17). This compares with the total sample value of 20 percent for men and 38 percent for women of high ability.

Only for men was there a reliable relationship between withdrawal pattern and campus for those of average (chi square = 6.94, df = 2) and low ability (chi square = 8.46, df = 2). These latter results primarily reflect the fact that fewer Los Angeles males of average and of low ability who withdrew appear to have done so between the spring and fall. This Los Angeles pattern was evident for high-ability males as well. That is, regardless of ability level, Los Angeles men withdrew earlier than their withdrawing peers at the other campuses.

There were no differences in withdrawal pattern across campuses for those students of high IDC (Table 18) nor for those high on both ability and IDC. With respect to withdrawal students of average or low intellectual motivation, campus differences appeared only for men (chi square for average IDC = 16.73, df = 2; chi square for low IDC = 6.57, df = 2). More Davis men of average IDC who withdrew did so between the spring and fall (54%), while fewer Los Angeles men of average IDC who withdrew did so during this period (7%). These percentages should be compared with the total of 27 percent for average IDC men who withdrew. Low IDC men who withdrew from Davis and Los Angeles did so early, while 18 percent at Santa Barbara withdrew between the spring and fall. Finally, there were no differences among campuses in pattern of withdrawal for those low in both ability and intellectual motivation.

What these results indicate is that for students who withdrew late, Davis women tended to be of high ability, and Davis men tended to be of high and average ability. Concerning early withdrawing males, Los Angeles men of average IDC tended to withdraw earlier than their IDC peers at Davis and Santa Barbara. There was a marked tendency for Los Angeles men to withdraw early, irrespective of level of ability or IDC (although statistically significant results were obtained for only some levels of ability and motivation).

WITHDRAWAL AND STUDENT TYPE

The type of student withdrawing will be discussed in terms of student status as of the spring quarter 1966-67. The classification of persister or nonpersister as of spring 1966-67 involved an examination of the student's entire pattern of enrollment and terms completed (see description in Method). The data indicating that less than a third of the students had withdrawn by this time led us to speculate as to how many might reenter the following fall for the junior year. This period is a logical one for transferring since it marks the completion of the generalized lower division curriculum and the beginning of more specialized work. Thus, more data were collected in the fall, which indicated(as noted earlier) that another 10 percent left before the third year. However, the fall classification does not involve the sophistication of the earlier measure. Limitations in finances precluded our following students beyond this logical transition point to be certain the student was absent for two consecutive terms before he was classified as a nonpersister. Therefore, the fall classification is simply whether or not the student was enrolled for the fall term.

The general thesis guiding the present study is that students typed by academic ability and intellectual disposition will transfer or withdraw from their original campus in a nonrandom fashion. The results just presented regarding withdrawal pattern do not directly bear on this thesis, since the analyses of withdrawal pattern have focused primarily on comparisons between institutions while the thesis is concerned with incidence of withdrawal within a given campus sample. Thus the balance of the chapter will discuss how students of various types pursue or fail to complete their education on a given campus.

Hypothesis 1a

Hypothesis 1a, proportionately more students typed as high on both intellectual motivation and ability, as well as those low on both measures, compared to those average on one or both measures, leave before the end of two years, assumes that the university system best accommodates the typical or average student and that this will be reflected in the smaller proportion of students average in ability and IDC withdrawing during the period of the study.

Davis sample. Withdrawal of Davis students (chi square = 11.23, df = 2), as of the spring 1967, was nonrandom among the three types of students (Table 19). However, it was not the case that fewer students of average ability and IDC withdrew. In fact, more Davis students low on both ability and motivation left (49%) compared with the other two groups combined (26%). When analyzed by sex, essentially the same results were obtained for men (chi square = 13.09, df = 2), but there was no significant difference in incidence of withdrawal for women. There were no significant relationships when fall status was taken into account.

Los Angeles Sample. No significant differences appeared among the types either for spring or fall status (Table 20).

Santa Barbara Sample. Reliable differences among ability-motivation groups were found for Santa Barbara students generally (Table 21) when viewed from the perspective of spring withdrawal (chi square = 7.91, df = 2) and in terms of fall status (chi square = 17.11, df = 2). However, analyses by sex revealed that differences held only for the men, and not in the pattern supporting our hypothesis. Men of low ability and IDC withdrew in larger percentages (50%, spring; 68%, fall) than the total sample of men (27%, spring; 36%, fall).

The hypothesis that those high on both measures are more likely to leave than those average on one or both measures was not supported. Proportionately more men at Davis and Santa Barbara low on ability and IDC measures withdrew as of spring 1967. With respect to fall withdrawal, this situation obtained only for Santa Barbara men. For women, there was no relationship between the ability-motivation type and withdrawal status at any campus.

However, the fact that the proportions of withdrawals *did not differ* between those high on both measures and those average on one or both measures is not inconsistent with the thinking which led to the formulation of the hypothesis. That is, it would seem reasonable to expect that proportionately fewer of the students high on both measures would leave than those of more average status. Thus, the equal proportions of high and average students constitute a disproportionate withdrawal rate for high-ability, high-IDC students. This interpretation is merely suggestive because it could also be argued that these two types of student were, in fact, equally accommodated, and this is why the incidence of withdrawal for these groups does not differ. Data to be presented later bearing on the reasons for withdrawing or staying indicate that these types of students are not responding in a like manner to their educational experiences and possibilities.

There was no relationship between timing of withdrawal and student type within any campus sample.

Hypothesis 1b

Hypothesis 1b, *proportionately more students typed as high or low on intellectual motivation (IDC), compared to those typed as average, leave before the end of two years; those typed as high and low will not differ in terms of proportion withdrawing before two years*, is based on the idea that there may be a curvilinear relationship between level of intellectual motivation and withdrawal. That is, those with a moderate interest in intellectual activities may be better accommodated by the university system than either those highly committed or not particularly committed to the world of scholarship.

Davis Sample. There was no significant relationship between level of motivation (IDC) and percentage of students of both sexes withdrawing (Table 22) as of the spring or as of the fall quarter. However, no low-IDC men who withdrew did so between the spring and fall quarters, compared with the overall percentage of 34 (chi square = 15.78, df = 2). Thus, low-IDC male withdrawals did so earlier than their higher IDC but also withdrawing peers at Davis.

Los Angeles Sample. As with Davis students, there was no relationship between IDC level and incidence of withdrawal (Table 23). Neither was timing of withdrawal related to IDC level.

Santa Barbara Sample. For all Santa Barbara samples there was a consistent trend for those students of average IDC to withdraw in smaller proportions than those high and low on this measure (Table 24). However, this trend is not statistically significant. With regard to status as of spring 1967, there was a significant relationship between IDC level and incidence of withdrawal for men (chi square = 7.20, df = 2). Compared with the percentage of the total sample of Santa Barbara men (28%) withdrawing in spring 1967, more men of low IDC (38%) withdrew. Since significantly more men of high IDC did not withdraw, the hypothesis as stated, was not supported. These same results were essentially replicated with analyses based on fall status. Men of low IDC were more likely to withdraw (47%) compared with the total sample (35%) of men (chi square = 8.02, df = 2). There was a significant relationship between IDC level and incidence of withdrawal for women (chi square = 6.45, df = 2); no one IDC level particularly contributed to the relationship. That is, the relationship was slight at each IDC level and significant only in the overall analysis.

There was no relationship between timing of withdrawal and IDC level for men or women at Santa Barbara.

The hypothesis positing a curvilinear relationship between level of intellectual motivation and incidence of withdrawal was clearly not supported by the data. Withdrawal may be an expression of a failure of the system to accommodate students. But we cannot conclude that highly motivated students are not as well accommodated as their less motivated peers, but neither can we conclude that they are better accommodated. At all three campuses, the loss of highly motivated students was approximately equal to that of their peers of average motivation, and this, in itself, is a result worth pondering.

Hypothesis 1c

Hypothesis 1c, *proportionately more students typed as low on ability, compared to those average and high, will leave; proportionately fewer students typed as high in ability, compared to those average and low, will leave before the end of two years*, is based on the fairly consistent finding in the literature that there is a moderate, negative *linear* relationship between measured ability and incidence of withdrawal. Hypothesis 1c is an unwieldly, although complete, expression of the prediction that there will be a negative linear relationship between the two variables of concern.

Davis Sample. As of spring 1967, there was a significant relationship between ability and incidence of withdrawal for men (chi square = 9.98, df = 2) (Table 25). The relationship appeared to be linear. However, it was only the low-ability group which showed a significantly greater incidence of withdrawal (48%) in comparison to the overall rate of 27 percent. With respect to fall status, there was no relationship for either men or women but only for the total sample (chi square = 6.34, df = 2). Here there was a slight tendency for students of low ability to show a greater incidence of withdrawal (57%) in comparison to the total sample (45%).

Analysis of time of withdrawal revealed a significant relationship only for women (chi square = 9.57, df = 2). More women of high ability (69%) who withdrew did so late--between the spring and fall quarters--in comparison with the total sample of withdrawing women who did so during this period (36%).

Los Angeles Sample. There was no relation between the three levels of ability and incidence of withdrawal for men or women, either with spring or fall status (Table 26). Further, there was no relationship between level of ability and pattern of withdrawal.

Santa Barbara Sample. Spring withdrawal status was not related to ability level for either sex (Table 27). However, fall status was related to ability for men (chi square = 7.82, df = 2) and women (chi square = 6.33, df = 2). Even so, the data did not support the hypothesis of a linear relationship between ability and incidence of withdrawal. For men and women, the major difference between ability levels was with respect to low ability students who withdrew in greater proportion (men, 59%; women, 58%) than the total incidence of men (35%) or women (48%).

Pattern of withdrawal was not related to ability level.

The hypothesis of a linear relationship between ability level and incidence of withdrawal was not supported at any of the three campuses. Only among Davis men in the spring and Santa Barbara men and women in the fall did students of low ability withdraw in higher proportions than those of high or average ability.

The data from which all tables in the present section were constructed are contained in Appendix F.

Table 16

Withdrawal Status as of Spring 1966-67 and Fall 1967-68 and Withdrawal Pattern of Students by Sex and Campus

	Withdrawal status				Withdrawal pattern		
	As of spring		As of fall				
School and sex	%	Total N	%	Total N	To Spring	Spring to fall	Withdrawal N
UCD							
Male	27	153	41	153	66	34	62
Female	31	178	49	178	64	36	88
Total	29	331	45	331	65	35	150
UCLA							
Male	33	238	34	238	98	2	81
Female	28	250	36	250	78	22	90
Total	31	488	35	488	87	13	171
UCSB							
Male	28	249	35	249	78	22	88
Female	36	363	48	363	74	26	176
Total	33	612	43	612	75	25	264
Total	31	1431	41	1431	76	24	585

Table 17

Withdrawal of Males and Females between Spring and Fall of 1967

by Ability Level, Sex, and Campus

	Total		Males		Females	
School and ability level	Withdrawal %	Total N	Withdrawal %	Total N	Withdrawal %	Total N
UCD						
High	62	32	56	16	69	16
Average	31	70	29	31	33	39
Low	23	48	20	15	24	33
Total	35	150	34	62	36	88
UCLA						
High	12	42	0	23	26	19
Average	12	82	5	37	18	45
Low	15	47	0	21	27	26
Total	13	171	2	81	22	90
UCSB						
High	21	58	16	32	27	26
Average	24	123	23	39	24	84
Low	29	83	29	17	29	66
Total	25	264	22	88	26	176

Table 18

Withdrawal of Males and Females between Spring and Fall 1967

by Intellectual Disposition and Campus

	Males		Females		Total	
School and IDC level	Withdrawal %	Total N	Withdrawal %	Total N	Withdrawal %	Total N
UCD						
High	17	12	50	14	34	26
Average	54	35	37	51	44	86
Low	0	15	26	23	16	38
Total	34	62	36	88	35	150
UCLA						
High	-5[a]	20	14	22	5	42
Average	7	41	21	47	15	88
Low	0	20	33	21	17	41
Total	2	81	22	90	13	171
UCSB						
High	25	20	33	24	30	44
Average	24	34	25	89	24	123
Low	18	34	25	63	23	97
Total	22	88	26	176	25	264

[a] Five percent more enrolled in this period than in previous period owing to returning students who had withdrawn between first date of enrollment and spring 1967.

Table 19

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Davis Students High on Both Ability and Intellectual Disposition, Low on Both, or Average on One or Both Variables

Ability and IDC level	Total		Males		Females	
	%	Total N	%	Total N	%	Total N
			Spring 1966-67			
High	18	33	21	19	14	14
Average	28	229	23	108	31	121
Low	49	49	67	15	41	34
Total	30	311	27	142	32	169
			Fall 1967-68			
High	45	33	37	19	57	14
Average	44	229	39	108	49	121
Low	55	49	67	15	50	34
Total	46	311	42	142	50	169

Table 20

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Los Angeles Students High on Ability and Intellectual Disposition, Low on Both, or Average on One or Both Variables

Ability and IDC level	Total %	Total N	Males %	Total N	Females %	Total N
			Spring 1966-67			
High	31	84	31	51	30	33
Average	30	314	31	155	29	159
Low	36	70	52	29	24	41
Total	31	468	66	235	28	233
			Fall 1967-68			
High	36	84	31	51	42	33
Average	34	314	32	155	31	159
Low	43	70	52	29	37	41
Total	35	468	34	235	36	233

Table 21

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Santa Barbara Students High on Both Abi

and Intellectual Disposition, Low on Both, or Average on One or Both Variables

Ability and IDC level	Total %	Total Total N	Males %	Males Total N	Females %	Females Total N
			Spring 1966-67			
High	33	61	33	43	33	18
Average	29	414	23	157	33	257
Low	44	93	50	22	42	71
Total	32	568	27	222	35	346
			Fall 1967-68			
High	48	61	44	43	56	18
Average	38	414	29	157	44	257
Low	61	93	68	22	59	71
Total	43	568	36	222	47	346

Table 22

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Davis Students by Three Levels of Intellectual Disposition

IDC level	Total %	Total Total N	Males %	Males Total N	Females %	Females Total N
			Spring 1966-67			
High	29	58	34	29	24	29
Average	26	184	19	83	32	101
Low	36	89	37	41	35	48
Total	29	331	27	153	31	178
			Fall 1967-68			
High	45	58	41	29	48	29
Average	47	184	42	83	50	101
Low	43	89	37	41	48	48
Total	45	331	41	153	49	178

Table 23

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Los Angeles Students by Three levels of Intellectual Disposition

IDC	Total		Males		Females	
level	%	Total N	%	Total N	%	Total N
			Spring 1966-67			
High	35	115	33	64	37	51
Average	29	257	31	124	28	133
Low	29	116	40	50	21	66
Total	31	488	33	238	28	250
			Fall 1967-68			
High	37	115	31	64	43	51
Average	34	257	33	124	35	133
Low	35	116	40	50	32	66
Total	35	488	34	238	36	250

Table 24

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Santa Barbara Students by Three Levels of Intellectual Disposition

IDC	Total		Males		Females	
level	%	Total N	%	Total N	%	Total N
			Spring 1966-67			
High	34	92	29	51	39	41
Average	28	333	21	125	32	208
Low	40	187	38	73	41	114
Total	33	612	28	249	36	363
			Fall 1967-68			
High	48	92	39	51	59	41
Average	37	333	27	125	43	208
Low	52	187	47	73	55	114
Total	43	612	35	249	48	363

2

Table 25

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Davis Students by Three Levels of Ability

Ability level	Total		Males		Females	
	%	Total N	%	Total N	%	Total N
			Spring 1966-67			
High	16	76	14	50	19	26
Average	28	171	28	78	28	93
Low	44	84	48	25	42	59
Total	29	331	27	153	31	178
			Fall 1967-68			
High	42	76	32	50	62	26
Average	41	171	40	78	42	93
Low	57	84	60	25	56	59
Total	45	331	41	153	49	178

Table 26

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Los Angeles Students by Three Levels of Ability

Ability	Total		Males		Females	
level	%	Total N	%	Total N	%	Total N
			Spring 1966-67			
High	28	131	30	76	25	55
Average	30	240	30	116	30	124
Low	34	117	46	46	27	71
Total	31	[illegible]	33	238	28	250
			Fall 1967-68			
High	32	131	30	76	35	55
Average	34	240	32	116	36	124
Low	40	117	46	46	37	71
Total	35	488	34	238	36	250

Table 27

Spring 1966-67 and Fall 1967-68 Withdrawal Rates of Santa Barbara Students by Three Levels of Ability

Ability level	Total %	Total Total N	Males %	Males Total N	Females %	Females Total N
Spring 1966-67						
High	31	149	28	95	35	54
Average	29	320	24	125	33	195
Low	41	143	41	29	41	114
Total	33	612	28	249	36	363
Fall 1967-68						
High	39	149	34	95	48	54
Average	38	320	31	125	43	195
Low	58	143	59	29	58	114
Total	43	612	35	249	48	363

V

Scholastic Achievement and Persistence

As predicted, college grades were related to persistence. Students who completed the last term during which grades were recorded, winter 1966-67, were compared to all those whose last completed term (during the course of the research) was fall 1966-67 or earlier. Some students entered in fall 1965-66 with the rest of the sample but did not complete even that first term; these individuals had no cumulative grade point average from UC, so were omitted from this analysis.

The predicted difference, in the direction of higher grades for the longer persisting students, held for all nine student types (Table 28), with differences ranging from .34 to .89 (a difference of 1.00 would represent a whole letter grade).

It was expected that, consistent with results described in the literature, college grades would parallel the aptitude test scores. Waller (1964) had reported that correlations between standardized ability tests and college achievement typically range from approximately .40 to .50 (also see Kennedy, 1961; and Sassenrath & Pugh, 1966). Correlations in the study reported here ranged from .25 for UCSB males using the SCAT, to .49 for females at Davis tested on the SAT.

Analyses were performed for the persisters until winter 1967 and withdrawals as of fall 1966 or earlier. For those who completed winter quarter 1967, ability was related to grades for each level of intellectual disposition (Table 29). No relationship was shown, however, between IDC and grades for the three ability levels. The correlation between the intellectual disposition categories and grades (-.018) was not significant. For those not completing winter quarter, ability was related to grades for each level of intellectual disposition, as with the first group (Table 30). IDC was not related to grades in a consistently linear fashion. The obtained correlation of -.133 is significant but so slight as to be almost negligible.

Examining the relationship between one's intellectual orientation and cumulative grade point average for the entire group (correlation of -.167) resulted in the same conclusion. In order to examine the relationship of grades and IDC free from the influence of any ability-IDC correlation, ability was held constant, leaving partial correlations between IDC and grades ranging from -.032 for UCLA males to .165 for UCLA females. Brown's (1968) research in a small liberal arts college also found that a liking for abstract, original, and reflective thinking was unrelated to grade point averages. He found first-year academic achievement unrelated to intellectual attitudes or activities, including discussions and material read. Correlations with OPI scales were: Thinking Introversion, .06; Theoretical Orientation, .16; Estheticism, -.03; and Complexity, -.03. (These findings on freshmen are most comparable to the group in the present study which did not complete winter quarter since most of these people had grades only for the first year.)

A number of studies have demonstrated a relationship between achievement in high school and persistence in college (Ivey, et al., 1966; Gadzella & Bentall, 1967; Summerskill, 1962). This study was no exception. For each type of student at each campus, persistence was related to high (A to B+) or low (B or lower) secondary grade point average, as reported by the student (the range of secondary grades is restricted by admission requirements of B average work or better in college preparatory classes). More students with higher grades persisted in college than those with lower secondary grades. At Davis, high school grades were related to persistence for average-IDC people and for those of average ability as well. This relationship also held for UCLA students who were below average in intellectual disposition, and those average on either ability or IDC. This was also true at Santa Barbara, but in addition, high school grades were related to persistence for those below average in ability and in intellectual disposition.

Table 28

Means and Standard Deviations of Cumulative Grade Points of Students Who Completed the Winter Term of 1967 and Students Whose Last Completed Term Was Fall of 1966[a]

Student type	Completed winter 1967 N	Mean	SD	Completed fall 1966 or earlier N	Mean	SD	Difference of means
Cell 1	125	2.90	.51	49	2.33	.11	.57
Cell 2	39	2.64	.41	22	2.28	.12	.36
Cell 3	16	2.49	.34	8	1.71	.24	.78
Cell 4	89	2.89	.46	26	2.55	.16	.34
Cell 5	397	2.61	.40	141	2.09	.05	.52
Cell 6	74	2.39	.47	33	1.99	.11	.40
Cell 7	46	2.91	.48	14	2.36	.19	.55
Cell 8	84	2.53	.40	34	1.94	.08	.59
Cell 9	124	2.39	.34	83	1.50	.06	.89

Note--Grade point average of 1.00 represents grade of D, and 3.00 represents B.

[a] Those who left before completing the first term were omitted.

Table 29

Cumulative College Grade Point Averages for Students Who Completed the Winter 1967 Term, by Ability at Three Levels of Intellectual Disposition[a]

IDC	Ability Above average	 Average	 Below average
Above average	2.90	2.64	2.49
Average	2.89	2.61	2.39
Below average	2.91	2.53	2.39

Note--Groups connected by underlining are not significantly different.

[a] Grade point average of 2.00 represents grade of C.

VI

Characteristics of Persisters and Nonpersisters

Questionnaire items and OPI scales were analyzed for differences, within the same campus and sex, between persisters and nonpersisters. A number of questionnaire differences were significant, including ways in which the campuses were described. This deviated from Conner's (1966) finding at Southern Methodist University that dropouts and retainees did not differ in the way they described the campus, using Pace's College and University Environment Scales. No OPI differences occurred. Owing to their small number, those who could not be classified as definitely persisting or nonpersisting were omitted from the analyses.

DAVIS SAMPLE

Near the end of their second college year, students were asked whether--in light of their experiences at UC--they would again choose to enter the Davis campus as freshmen. As might be expected, those who left Davis were more apt than those who stayed to state that they either probably or definitely would not repeat their actions by beginning college at UCD. Yet, more nonpersisters than persisters stated that they made much progress in acquiring a genuine interest in intellectual matters, and in the skill of analyzing information into elements, relationships, etc. Larger percentages of male nonpersisters claimed to have made much (as opposed to some, or little or no) progress in the educational objectives of applying abstractions or principles to

Table 30

Cumulative College Grade Point Averages for Students Whose Last Completed Term Was Fall 1966 or Earlier, by Ability at Three Levels of Intellectual Disposition

IDC	Ability		
	Above average	Average	Below average
Above average	2.33	2.28	1.71
Average	2.55	2.09	1.99
Below average	2.36	1.94	1.50

Note--Individual groups connected by underlining are not significantly different.

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Near the end of their second college year, students were asked whether--in light of their experiences at UC--they would again choose to enter the Davis campus as freshmen. As might be expected, those who left Davis were more apt than those who stayed to state that they either probably or definitely would not repeat their actions by beginning college at UCD. Yet, more nonpersisters than persisters stated that they made much progress in acquiring a genuine interest in intellectual matters, and in the skill of analyzing information into elements, relationships, etc. Larger percentages of male nonpersisters claimed to have made much (as opposed to some, or little or no) progress in the educational objectives of applying abstractions or principles to particular situations and in the ability to synthesize. Davis female withdrawals rated themselves higher than did persisters in developing greater insight into and understanding of mankind.

If these self-evaluations by those who left are realistic, they would be reasons for pride on the part of the Davis faculty. But the fact that the students feel that they would choose to start anew elsewhere leads one to wonder if these students felt that progress had been made in spite of Davis. Possibly, the students who transferred to another school would attribute their progress to their new campus.

The chi square distributions of estimated number of books read during an average quarter differed between persisters and nonpersisters. On the average, those who left claimed to have read more nonrequired books. On the average, Davis male withdrawals read more books on philosophy, biography, science fiction, and novels than did the persisting Davis males. Female withdrawals read more books on art and music than did those who stayed, and nonpersisters of both sexes averaged more reading of scientific material.

The distribution of time spent on various activities also differed. A higher percentage of men who left (28%) claimed to spend at least nine hours per week, preparing papers and essays compared to 16% of the persisters. More male withdrawals (58%) read at least five hours per week for pleasure, compared to 23 percent of the persisters. More women who left spent time in serious nonrequired reading (44% of the girls who remained stated that they do none of this type of reading; this was true for 28% of the nonpersisters), and fewer withdrawals devoted much time to the initial reading of required material (26% spent 13 hours or more per week compared to 45% of the persisters).

The females who remained preferred independent reading and writing as the predominant type of task in college, whereas women who left Davis preferred to see this as supplementary to their usual work.

For both sexes, more nonpersisters than persisters expressed dissatisfaction with their relationships with Davis faculty, with the degree of diversity in the student body, and with the amount of warmth and friendliness of the students. However, those who left expressed more satisfaction than those who stayed with the pursuit of individual study or research on that campus.

Reexamining data reported earlier gives some insight into the differences between persisters and nonpersisters. The most telling information is that low-ability Davis males were more likely to leave than high-ability males. Also, between one-third and one-half of the Davis nonpersisters received academic dismissals. Interview data and commonsense suggest that those dismissed from UC would usually transfer to a less prestigious school, for example, to a junior or state college rather than to UC Berkeley or Stanford. Omitting consideration of why students left their original campus, Trent and Medsker (1968) reported that transfer students in a national sample tended to remain within public or private institutions rather than switching from one to the other. For instance, from public universities, 55 percent of the transfers went to public universities, 23 percent to public four-year colleges, and 3 percent to public junior colleges.

Newman (1965) concluded that dropouts from the University of Chicago were less realistic in their self-evaluations than were graduates. Perhaps, then, the men who left Davis as a result of academic failure could be expected to display a certain amount of defensiveness and a lack of realism in discussing their accomplishments. Perhaps they react to the humiliation of failure to maintain acceptable academic accomplishments at a prestigious university with an attitude of "Oh well, that isn't really such a great place after all, but I've made exceptionally good use of my time," rather than accepting it as a personal failure.

A second interpretation applies to both sexes. Davis, though having a reputation for being friendly, is described by those who left as lacking in warmth and friendliness. These students were apparently not discovering a compatible social group. These same individuals reported doing more outside reading. Possibly this reading was a way to make up for an inadequate social life. Or, because of this inadequate social life, perhaps more time was available to these students for reading outside material.

LOS ANGELES SAMPLE

As with the Davis nonpersisters, larger percentages of UCLA withdrawals than persisters would definitely not enroll at UCLA as freshmen, had they to do it over again. However, UCLA transfers interviewed did not seem as "turned off" by their UC experience as was true of those leaving the other campuses. In fact, there was a tendency to seek out other large, urban schools.

UCLA withdrawals expressed dissatisfaction with their lack of acquaintance with the faculty than was expressed by those who stayed. The interviewees stressed that one could establish contacts with faculty members on this large city campus, but one needed to be aggressive and take the initiative to do so. Some expressed a desire to establish such contacts, but lacked the courage. Even among persisters, satisfaction with student-faculty relations was given as a primary reason for staying by only 3 percent.

More nonpersisters than persisters expressed satisfaction with the involvement or concern shown for political issues by UCLA people. From many UCLA students, the interviewers derived a strong feeling that these UCLA students had sought a campus that was an extension of the world rather than isolated from the world. This involves diversity of people and ideas, the opportunity for confrontation with difference, and the chance to test oneself in the arena of the real world. Consequently, even apolitical students considered political activity on campus as desirable. Generally, those who transferred to another school had not changed this orientation: They still wanted an education that was of this world, not cloistered. While some students in the transfer interview sample had moved to an even more politically active campus--specifically, UC Berkeley--most had transferred to places that would compare unfavorably in their view with UCLA on this dimension. Therefore, the nonpersisters would be using a different reference from that of the persisters in judging the UCLA campus community.

Nonpersisters would be likely to be using the school to which they transferred (usually viewed by them as too apathetic) as their reference or, if out of school, their working situation where, as a whole, their colleagues were less politically aware or concerned than had been true of their college peers at UCLA.

One reading of the evidence presented by UCLA people is that those who left were victims of a misperception of what is required to maintain oneself in that setting. The persisters had considered study and memory work necessary. However, those who left--one-third of these academic failures--perceived UCLA as a place in which studies were thought by most to be of little or no more importance than socializing (one-third of the men reported less studying in relation to socializing than had been expected), and in which memory work was less necessary than had been anticipated. Such misperceptions as to the requirements and the actual time expenditure of one's peers could be expected on this communter campus more so than in a residential setting in which the study habits of one's peers are readily observed.

Thirty-five percent of those men who left found no more memory work than they had expected (compared to 19% of persisters), whereas half (49%) of those who stayed reported more memory work involved in their classes than they had anticipated (compared to 29% for nonpersisters). Fewer women who left felt they had made progress in acquiring specific knowledge in a field--often a rote memory task--than was true of those who stayed. The ability to apply abstractions to a particular situation was judged in the same way.

More outside reading was reported by the nonpersisters--possibly they were reading extraneous materials while their peers who made the grades were memorizing texts and lecture notes. The reading areas in which more was read, on the average, by nonpersisters than persisters included literary criticism, biography, and behavioral science for the men, and philosophy and novels for the women.

The implication that to stay is to memorize, and that outside reading is not reflected in the grading system should be unsettling to those who believe in and wish to promulgate UCLA's high academic reputation. Half (49% of the men, 44% of the women) of the young people entering UCLA in our sample considered the academic reputation of the Los Angeles campus of the University of California to be the most important prereason for attending that particular institution; presumably phrases, such as high standards and intellectual stimulation, were more closely identified with that lofty image than was rote memory work.

SANTA BARBARA SAMPLE

Persisters were more likely than nonpersisters to state on the questionnaire that they would choose to attend Santa Barbara if they were doing it over. Dissatisfaction was expressed by the following percentages of those who left concerning the small degree of tolerance for divergent views (25%), the amount of warmth or friendliness in the student body (31%), the "bull-sessions" with their peers (9%), and their estimation of the progress they had made toward appreciation of cultural matters (32%). More of those who stayed were more satisfied in these areas than were nonpersisters and with their acquaintance with faculty (51% versus 38% of the nonpersisters), and the availability of quiet and privacy on the campus (68% of persisters versus 56% of the withdrawals).

Male withdrawals were less likely than those who stayed to feel they had progressed toward the goal of acquiring specific knowledge of the terminology and trends in a particular field. However, they also were less likely than male persisters to want their schoolwork taken up with specialization, so lack of specific knowledge is probably not judged by these nonpersisters to be a serious deficiency. More women withdrawals (41%) felt they had made much progress in acquiring a genuine artistic interest than was true for those who stayed (26%).

More women who left (42%) than those who stayed (25%) found less than they expected of studying in relation to socializing. Other data suggest that for some, at least, this was an unpleasant surprise: Across the sexes, 36 percent of the nonpersisters (compared to 20% for persisters) described the study/socialize balance as unsatisfactory. More nonpersisting than persisting women also were disappointed with the degree of tolerance for divergent dress and ideas (nonpersisting, 27%; persisting, 6%), and of seriousness toward studies (nonpersisting, 63%; persisting,42%). Male nonpersisters stated in higher percentages than their remaining peers that they either found more of, or what they expected,in the intellectual commitment of the students. This also applied to an interest in learning for its own sake. On the other hand, more male persisters than withdrawals found more than they expected in the way of warmth and friendliness of the students and involvement with political and social issues.

Males who stayed at UCSB estimated having read fewer nonrequired books on the average in the categories of philosophy, biography, science fiction, scientific, and novels.

Male persisters spent less time than nonpersisters reading course-related but nonrequired material. Fewer (6% compared to 24% for nonpersisters) read occupational or professional journals. Persisters of both sexes spent more time reading required material (45% of the girls and 29% of the men spent at least 13 hours per week reading new material, compared to 26% and 20% for the nonpersisting women and men). Women who stayed also spent more time rereading, reviewing, studying, or memorizing class material, and attending classes. They were less likely than withdrawing females to read magazines of commentary, literature, or politics. Curriculum was more apt to be the holding feature of the campus for those females who stayed.

Fewer Santa Barbara students left as a result of academic dismissals than was true of UCD and UCLA people. The social atmosphere of Santa Barbara emerges as a more important reason for leaving. A reason given by many for leaving is that the campus is too social. UCSB does, in fact, hold a reputation of being a "party school." However, this complaint may have an element of "sour grapes." The Santa Barbara men, while on the one hand saying the campus is too social, also maintain that the students are intellectual and serious about their studies, and lack warmth and friendliness. Also--as at Davis--these men report more reading than the persisters.

The picture for the females differs from the males in a way that lends support to the above interpretation. The females who left did not see the students as very serious, yet did not complain about lack of friendliness, and didn't differ from persisters in the amount of outside reading. It appears that they found their social life more satisfactory than did the males who left.

VII

Reasons for Persistence and Nonpersistence

The general question of why students leave college has been addressed by other researchers, such as Iffert in his national study (1957), and therefore is of secondary interest in the current research. According to Iffert, the most prevalent reason for transferring from one college to another is general dissatisfaction (rather than grades, finances, or medical reasons). Difficulties with grades figured among the most common reasons for leaving the University of California in the study reported here (which did not distinguish between those who continued their education at another college after leaving UC and those who did not). Approximately one-third of those who left Davis and Los Angeles were dismissed, and sizable minorities left Los Angeles and Santa Barbara voluntarily because of concern about grades (Table 31). The atmosphere--too social or not intellectual enough--appears to have been a more relevant reason for withdrawal from UCSB than were grades, and was more relevant there than at Davis or Los Angeles. Other prominent reasons for leaving UC included dissatisfaction with the curriculum (at UCD and UCSB) and with student-faculty relations (UCLA). Many who left these campuses found other places which were better suited to their educational or vocational interests, according to transfers who responded to the sophomore questionnaire.

Of major interest to the authors and a continuing concern of the Center staff is the loss of potentially outstanding students. Such losses, even from outstanding colleges, have been noted by Heist (1968), who expressed a concern for potentially creative students who leave college or transfer from one school to another, ". . .seemingly seeking an education that did not exist." Thus, we have focused here on students of a particular type (in terms of intellectual motivation and academic ability) rather than on University of California or college students in general.

Data concerning reasons for leaving came from two sources: the registrar's office on each campus and students' self-reports in the sophomore questionnaire. The registrar's data covered the entire freshman questionnaire sample, whereas the second source involved the somewhat smaller group which answered both questionnaires. The time period covered by the second source was fall semester 1965-66 through winter quarter 1966-67. Registrar's data extended through spring quarter 1966-67.

REGISTRAR'S DATA

Information on why a student did not complete a particular quarter or semester was categorized as either academic dismissal or own reasons (that is, not asked to leave by the university). The few cases of disciplinary dismissal and unknown reasons for leaving were omitted.

Reasons for failing to complete a term were viewed across the one and two-thirds years being studied (fall 1965-66 through winter 1966-67). There was a relationship between reason for withdrawal and IDC of students at UCLA but not at Davis or Santa Barbara. Academic dismissals were more characteristic of low- than high-IDC individuals at UCLA, with the converse being true for nonacademic reasons for not completing a term (Table 32). When the schools were combined, the same relationship held, indicating a trend in the same direction across the campuses.

The relationship of academic ability to reason for withdrawal generally parallels that for intellectual disposition, with academic dismissals being more characteristic of below-average ability people at UCLA and holding for the total of the three campuses. For the total sample, more people with above-average ability than their classmates of average or below-average ability did not complete a particular term for other reasons (Table 33).

The sample was divided into nine cells by ability and intellectual disposition: combinations of high, medium, and low on the two factors. The only difference attributed to nonchance factors occurred at UCLA and was closely related to the above findings: Students of low IDC and average ability were dismissed in higher percentages (63%) than was true of those with above-average intellectual disposition and ability (18%) or above-average intellectual disposition and average ability (10%).

The ability-IDC breakdown was used to form four groups as described in the Introduction: cell 1(high on both factors); cell 5 (average on both); cell 9 (low on both); and cells 2, 4, 6, and 8 (average on one factor, high or low on the other). A relationship emerged between type and reason for leaving (across campus and term--fall semester 1965-66 through winter quarter 1966-67). Dismissals were more characteristic of those low on both IDC and ability (cell 9, 63% dismissed) than of those average on either IDC or ability (cells 2, 4, 6, and 8; 40% dismissed). This trend was reversed for the two categories on the alternative of leaving on one's own accord.

QUESTIONNAIRE DATA

Students who had withdrawn from their original campus (by the time they answered the sophomore questionnaire) responded to an item dealing with reasons for having left. Thirty-seven separate possibilities were offered, any number of which an individual might check as a primary or secondary reason for leaving, and 20 were answered by enough people to warrant analysis by the typologies. Contrary to expectations, student type was not related to reasons for leaving at Davis. Table 34 shows reasons checked by largest percentages of IDC groups at Davis.

In an earlier report (Mock, 1968) it was shown that high-IDC students were more prone to student activism. However, it was not just the high-IDC students--those most apt to be vocal in their criticisms of university education--who applied the term "irrelevant" to the formal, that is, classroom, aspects of a college education. Also, these comments came not just from those campuses known for their student activism. Even on the relatively conservative Davis campus, students said they left because the courses were unrelated to their lives.

Consistent with the registrar's data, dismissal was related to type of student at Los Angeles (Table 35). Greater percentages of low-IDC than high- or average-IDC people reported academic dismissals from UCLA; this differentiation also appeared in the four IDC-ability types, with larger percentages of those below average on both dimensions leaving for academic reasons (cell 9, 72%) than was true of their peers (both dimensions average, 26%; one average, 33%; both high, 11%).

Santa Barbara was the only campus that clearly fulfilled the expectation that reasons for leaving other than dismissal would be related to type. Discontent with the intellectual atmosphere and with curriculum was expressed by more high-IDC people than low-IDC students (Table 36). The four IDC-ability groups showed differences of the same type (Table 37). On the other hand, the individuals average on these dimensions who left Santa Barbara were more concerned with interpersonal aspects: They felt the campus was too impersonal and they expressed loneliness. Interviewees complained that one could not be close to people, that more intimacy and honesty was needed. They also stated that the environment was too social. This apparently meant others were too much involved in social life. These students presumably felt excluded from this aspect of campus life. However, interview material suggests that much of the socializing is rather shallow, especially that associated with the district of Isla Vista, an almost wholly student living area adjacent to the campus: ". . .for all its friendliness, it's a superficial friendliness." Perhaps the complaints of loneliness and impersonality would not necessarily disappear as a result of being integrated into this social life.

Those students who stayed did so primarily because of approval of the formal aspects of their college education (Table 38): the selection of good, stimulating courses; satisfaction with the faculty, and, at the large Los Angeles campus, facilities such as the library, laboratories, etc. Peer relations were important in keeping one-third of the persisters on their campuses--the social atmosphere at Santa Barbara and the opportunities for meeting the kinds of people with whom the students wished to associate at UCLA and Davis. Close to a majority of the students who remained at each campus cited these as either primary or secondary reasons for having stayed.

The students still at UC were asked to speculate as to potential primary or secondary reasons they might not complete a bachelor's degree on their present campus (Table 39). Ignoring campus differences, nearly one-third could not imagine this situation. One-third to one-half thought a college with a better program might be either a primary or secondary reason for leaving, one-fifth to one-third mentioned grades or academic pressure, and one-quarter to one-third felt finances would be involved. More than a quarter of the students thought discontent with the system might influence them to leave. In this connection, it is interesting to note that parental dissatisfaction with UC was mentioned less often than any other item.

We expected to find a relationship between type of student and his reported potential reasons for leaving UC. This was supported for a few items (Table 40). Discontent with the system (checked by greater percentages of high-IDC than low-IDC students) and marriage or pregnancy (greater percentages of low-IDC than average-IDC students) were differentiating items at Davis. The latter item also differentiated students at UCLA as did the possibility of transferring to a college with a better program (more high-IDC students than low-IDC might transfer for this reason). Poor grades or too much academic pressure appeared more of a threat to low-IDC than high-IDC students at UCLA. Some average-IDC students couldn't imagine not graduating from UCLA--this was not so likely for above-average individuals. The possibility of transferring to a college with a better program was the only reason differentiating Santa Barbara student types--more high-IDC than low-IDC students considered transferring under this circumstance.

Reasons for remaining at a particular campus also related to the typologies employed. The differentiating reasons at Los Angeles were superior facilities (checked by higher percentages of students of average than low IDC) and not having considered transferring (checked by higher percentages of average- than high-IDC students, with IDC-ability differences in the same direction). At Davis, more average-IDC than high-IDC students remained because of a desire for vocational preparation, consistent with the inverse relationship found in freshman data between vocational goals and IDC. No relationship was shown between reasons for remaining at Santa Barbara and student type.

Students persisting at UC campuses, plus those who transferred to another institution, were queried as to the important factors in keeping them in college *per se*. Three reasons--representing the practical, intellectual, and social sides of college--received the strongest endorsement across schools: At least four-fifths of this group mentioned the importance of obtaining a college degree as relevant, and a majority listed it as a *primary* reason for remaining in college; stimulating or satisfying course work was checked by three-quarters of the students, with a majority seeing it as a primary reason. A majority felt that school was a good place to meet the kinds of people with whom they wished to associate.

Whereas most changes that had taken place in the students after one year of college were attributed by them to being in an environment with *different* kinds of people--and therefore having to question their own values and world assumptions--at Santa Barbara one heard about the *lack* of difference: "Most of the kids are like you are." (Change at UCSB was more likely to be seen as resulting from being away from home or from living among peers.) Consequently, at Santa Barbara, remaining in college because of its being a good place to meet the kinds of people with whom one wishes to associate no doubt means people like oneself.

Close to a majority of the people still enrolled in college said that satisfaction with the intellectual atmosphere and the relevance of college to their lives were important aspects in their decision to remain in college. There were, of course, dissenters. One Los Angeles student, commenting on dorm conversations, said there was "an amazing lack of people in the dorms who think. . .they only talk about sex, the draft, and sports." There were also comments about the unreality of life on the two campuses isolated from large cities. The influence of the location on the atmosphere at these two smaller UC campuses was seen by the interviewers as important. For example, public transportation into the town of Santa Barbara is infrequent, resulting in a focus on the campus and a common environment totally unmatched on the Los Angeles campus with its commuter orientation.

Type of student was related to reasons for remaining in college *per se* (Table 41). The high-IDC sample originating from Santa Barbara endorsed stimulating or satisfying college work as a reason for remaining in college in larger percentages than did their low-IDC schoolmates. The same IDC difference between high-and low-IDC people at Davis and Santa Barbara was sustained on the items of satisfying intellectual atmosphere. The direction of the difference was reversed for the importance of obtaining a college degree (for UCD and UCLA people) and satisfactory social aspect (for UCSB) as reasons for continuing. Also, for the Santa Barbara sample, more average-IDC students than high-IDC students never considered dropping out.

The IDC-ability groups were related to reasons for remaining in school for the group that started at Santa Barbara but not for the other two samples (Table 42). Average individuals were more likely than others to be biding time in school until they could think of something else they wanted to do, and more below-average people than others were influenced to remain by the social life.

Table 31

Students' Reasons for Leaving the University of California, by Campus, in Percentages

Reason	UCD	UCLA	UCSB
Academic dismissal			
Primary reason	38	30	15
Primary or secondary	39	33	19**
Prefer present school			
Primary reason	21	16	23
Primary or secondary	25	21	28
Unsatisfactory curriculum			
Primary reason	15	11	13
Primary or secondary	24	20	26
Left voluntarily because of grades			
Primary reason	8	21	16
Primary or secondary	10	27	24*
Atmosphere not intellectual enough			
Primary reason	7	4	17
Primary or secondary	10	8	27**
Too socially oriented			
Primary reason	0	3	16
Primary or secondary	1	9	36**
	UCD	UCSB	UCLA
Unsatisfactory student-faculty relations			
Primary	4	8	7
Primary or secondary	10	19	27*
Loneliness			
Primary reason	3	7	10
Primary or secondary	6	15	23**

Note--Groups connected by underlining are not significantly different.

*Significant at .05 level.

**Significant at .01 level.

Table 32

Reasons Reported by Registrar for Students Not Completing Academic Term, by Intellectual Disposition

Reason	IDC					
	High		Average		Low	
	N	%	N	%	N	%
			UCD			
Academic dismissal	9	53	22	47	19	59
Own reason	8	47	25	53	13	41
			UCLA			
Academic dismissal	7	21	28	39	19	58
Own reason	27	79	43	61	14	42
			UCSB			
Academic dismissal	8	44	33	49	24	57
Own reason	10	56	35	51	18	43
			Total*			
Academic dismissal	24	38	83	47	62	61
Own reason	40	62	95	53	39	39

*Significant at .01 level.

Table 33

Reasons Reported by Registrar for Students Not Completing Academic Term, by Ability

Reason	High N	High %	Average N	Average %	Low N	Low %
			UCD			
Academic dismissal	5	36	24	51	22	58
Own reason	9	64	23	49	16	42
			UCLA**			
Academic dismissal	7	18	26	33	23	51
Own reason	32	82	52	67	22	49
			UCSB			
Academic dismissal	18	51	32	44	16	55
Own reason	17	49	41	56	13	45
			Total*			
Academic dismissal	30	34	82	41	61	55
Own reason	58	66	116	59	51	45

*Significant at .05 level

**Significant at .01 level.

Table 34

Reasons for Leaving UC Davis Reported by at Least One-Third of Any Intellectual Disposition Group, in Percentages

Reason	IDC High	 Average	 Low
Academic dismissal	43	30	48
Irrelevant course work	36	13	9
Prefer present school	7	27	33
Too competitive and/or grade oriented	14	13	33

Table 35

Reasons for Leaving UC Los Angeles Reported by at Least One-Third of Any Intellectual Disposition Group and/or Differentiating between Groups, in Percentages

Reason	IDC High	 Average	 Low
Academic dismissal	18	24	74*
Left voluntarily because of grades	14	33	26

Note--Where overall differences occur, groups connected by underlining are not significantly different.

*Significant at .01 level.

Table 36

Reasons for Leaving UC Santa Barbara Reported by at Least One-Third of Any Intellectual Disposition Group and/or Differentiating between Groups, in Percentages

Reason	IDC High	 Average	 Low
Atmosphere not intellectual enough	48	30	13**
Unsatisfactory curriculum	48	28	13**
	Average	High	Low
Too socially oriented	46	44	20*
Atmosphere too impersonal	39	17	9**
Loneliness	26	13	4*

Note--Groups connected by underlining are not significantly different.

*Significant at .05 level.

**Significant at .01 level.

Table 37

Self-reported Reasons for Leaving UC Santa Barbara Which Differentiated between Intellectual Disposition-Ability Groups, in Percentages

Reason	IDC-ability group			
	Both high	One average	Both average	Both low
Unsatisfactory curriculum	53	31	28	10*
Atmosphere not intellectual enough	41	36	28	5*
	Both average	One average	Both high	Both low
Atmosphere too impersonal	41	28	12	5**
	One average	One high	Both average	Both low
Irrelevant course work	28	29	13	0*

Note--Groups not connected by underlining are significantly different.

*Significant at .05 level.

**Significant at .01 level.

Table 38

Primary or Secondary Reasons for Remaining at the University of California Two Years, Reported by Students, in Percentages

	UCD		UCLA		UCSB	
Reason	Primary reason	Primary & secondary	Primary reason	Primary & secondary	Primary reason	Primary & secondary
Satisfactory faculty	40	69	27	56	34	64
Course work stimulating	40	63	36	63	42	61
Satisfactory curriculum	37	58	41	65	28	55
Superior facilities	17	42	41	63	13	30
Good place to meet people	39	59	33	53	29	49
Satisfactory social atmosphere	22	50	29	49	33	55
Good job preparation	30	40	32	44	23	36
Extracurricular activities	16	36	20	37	22	36
Satisfactory competition	19	39	12	31	14	36
Satisfactory intellectual atmosphere	19	45	20	47	17	37
Good student-faculty contact	20	45	3	15	14	31
Opportunity for self-expression, creativity	15	33	13	29	20	38

Table 39

Probable Reasons Given for Leaving UC, Reported by Students, in Percentages

	UCD		UCLA		UCSB	
Reason	Primary reason	Primary & secondary	Primary reason	Primary & secondary	Primary reason	Primary & secondary
Prefer college with better program	38	51	26	37	40	49
Can't imagine leaving	29	30	34	40	24	31
Academic pressure	17	34	20	37	12	20
Financial reasons	12	25	16	33	16	30
Discontent with the system	16	28	17	31	11	26
Marriage, pregnancy	7	23	9	26	12	26
No goals that make all the work worthwhile	14	26	10	20	7	15
Health, physical or emotional	8	16	7	22	7	13
College irrelevant to interests	9	17	6	17	8	16
Prefer professional/technical school	11	17	5	9	5	8
Disinterest in completing four years at this time	7	14	6	11	4	13
No personal reason to be here yet	9	12	3	7	7	13
Can achieve my college goals in less than four years	2	6	5	10	3	8
Parental dissatisfaction with UC	1	4	0	3	1	6

Table 40

Probable Reasons for Leaving the University of California Which Related to Intellectual Disposition, in Percentages

	UCD			UCLA			UCSB		
	High	Average	Low	High	Average	Low	High	Average	Low
Academic pressure									
Primary reason	0	20	22**	13	19	28*	5	11	16
Not checked	67	71	51	78	61	53	89	79	76
Prefer college with a better program									
Primary reason	42	40	29	44	23	16**	52	41	33*
Not checked	58	45	54	50	65	71	36	50	63
Discontent with the system									
Primary reason	39	12	7**	25	16	9	16	11	7
Not checked	49	75	83	56	71	78	71	74	75
	Average	High	Low	High	Average	Low	High	Average	Low
Marriage, pregnancy									
Primary or secondary	16	27	37*	11	28	35**	14	27	33
Not checked	84	73	63	89	72	65	86	73	67
	High	Average	Low	High	Low	Average	High	Average	Low
Can't imagine leaving									
Primary or secondary	27	29	34	23	45	46*	18	34	31
Not checked	73	71	66	77	55	54	82	66	69

Note--Groups connected by underlining are not significantly different. Notice nonlinear ordering of some groups. Percentages for secondary reasons are omitted in first three items.

*Significant at .05 level.

**Significant at .01 level.

Table 41

Reasons for Remaining in School Which Related to Intellectual Disposition, by Campus, in Percentages

Reason	UCD			UCLA			UCSB		
	High	Average	Low	High	Average	Low	High	Average	Low
College work stimulating									
Primary	50	56	33*	51	51	48	67	54	40*
Secondary	29	26	30	23	26	28	12	23	29
Not checked	21	17	37	26	23	24	21	23	32
Satisfactory intellectual atmosphere									
Primary	31	27	21*	30	22	24	33	27	13**
Secondary	33	24	12	28	29	31	27	26	23
Not checked	36	49	67	42	49	45	40	47	64
Importance of college degree									
Primary	41	58	74*	51	72	83*	63	63	73*
Secondary	30	20	17	25	17	11	13	23	20
Not checked	29	22	9	24	11	6	24	14	7
Satisfied with social aspects									
Primary	9	13	10	14	16	27	10	22	21*
Secondary	24	22	23	19	24	24	18	25	32
Not checked	67	65	67	67	60	49	72	53	47
	High	Average	Low	High	Average	Low	High	Low	Average
Never seriously considered leaving school									
Checked	19	24	32	24	38	43	16	29	38*
Not checked	81	76	68	76	62	57	84	71	62

Note--Where overall differences occur, solid connecting lines indicate no *post hoc* individual differences. Notice nonlinear ordering of some groups.

*Significant at .05 level.

**Significant at .01 level.

Table 42

Reasons for Staying in School Which Related to the Intellectual Disposition-Ability Types at UCSB, in Percentages

Reason	IDC-Ability group			
	Both high	Both average	One average	Both low
Satisfied with social aspect				
Checked	26	44	48	63*
Not checked	74	56	52	37
	One average	Both high	Both average	Both low
To postpone decision about my future				
Checked	22	19	11	9*
Not checked	78	81	89	91

Note--Groups connected by underlining are not significantly different.

*Significant at .05 level.

VIII

Satisfaction with Campus Characteristics

The focus on different types of students at the university led to the hypothesis that differences would occur in the way persisters and nonpersisters viewed their campuses and in the satisfactions they felt with their experiences on these campuses, but that these relationships would vary from one type of student to another. It was assumed that some of the qualities related to staying or leaving for high-IDC people would be less relevant in the lives of their low-IDC peers. Items describing the campus or satisfactions with the campus and educational experiences were analyzed by persistence for each type of student being studied. As predicted, many differences were found between persisters and nonpersisters, usually in the direction of more satisfaction on the part of the persisters. Generally, a particular item was statistically related to persistence for only one type of student, supporting the contention that different kinds of items would be relevant to the different types of students.

First looking only at the differences between persisters and nonpersisters by type, the following are among the areas in which persisters average on the ability and motivation indices were more satisfied than average nonpersisters: peer relations, relations with faculty, the seriousness and intellectual commitment of their college peers, and their own progress toward goals associated with a liberal arts education.

Nonpersisters below average (on the intellectual and ability variables) were more satisfied than persisters with academic standards, counseling opportunities, tolerance for divergency, the amount of memory work involved in classes, and their own progress toward academic goals. Few differences were shown between above-average persisters and nonpersisters.

UC LOS ANGELES

Persisting UCLA students average on only one dimension of the IDC-ability typology rated the intellectual or scholarly commitment of their fellow students as very or somewhat satisfactory in larger percentages than did nonpersisters (Table 43). One student noted, "Learning doesn't seem to be the chief objective here; it's getting through your studies so you can go out and have fun." Another observed, "Standards aren't as high as I expected. . .There is more a social than an intellectual atmosphere." Several items showed significant differences between persisters and nonpersisters average on both dimensions with more persisters indicating satisfaction with: their acquaintance with the faculty, their opportunity to meet with personnel to talk about course work, the warmth and friendliness of the students, and their own development of a scientific approach to problem solving. No differences between persisters and nonpersisters appeared for those high or low on both dimensions.

Using IDC alone, significant differences between persisters and nonpersisters were found for some items for average-IDC people (Table 44). In addition, average persisters were more satisfied with the opportunity UCLA provided to "be exposed to the best thinking of the ages." Low-IDC persisters were more likely to be neutral than nonpersisters concerning the pursuit of individual study or research, and to be very or somewhat satisfied with faculty acquaintance.

UC DAVIS

Above-average individuals (on IDC-ability) who left Davis were dissatisfied with the availability of quiet and privacy (Table 45). No differences between persisters and nonpersisters occurred for people below average on both dimensions. For people average on one dimension, the ones who stayed were satisfied in larger percentages with the seriousness with which studies were taken on campus and with the help Davis had given in furthering their appreciation of cultural and esthetic matters, but withdrawals were more apt to be very satisfied with course work. Persisting students average on both dimensions were satisfied in larger percentages with faculty acquaintance and with their exposure to ideas which led to a more comprehensive world view. The IDC viewed alone duplicated some of these results (Table 46). In addition, low-IDC nonpersisters were satisfied with academic standards and counseling on educational or vocational plans in larger percentages than those who stayed. Even so, they were less satisfied than the persisters with opportunities to make faculty acquaintances.

UC SANTA BARBARA

Santa Barbara showed many more significant differences between persisters and nonpersisters of a given type than was true at Los Angeles or Davis. Most occurred between persisters and nonpersisters average on the intellectual disposition dimension. In fact, only one difference occurred for the above-average individuals: More high-IDC persisters were satisfied with the seriousness with which studies are taken than nonpersisters (Table 47).

For students average on either IDC or ability, peer relations were satisfactory in larger percentages for persisters ("bull-sessions" with fellow students, and warmth and friendliness of students, Table 48). Occupational preparation, cultural appreciation, and general attitude toward scholastic matters were more apt to be rated as satisfactory by persisters average on one dimension (Table 49).

Persisting and nonpersisting students average on either IDC or IDC and ability differed on items concerning the grade grubbing-learning balance, with more nonpersisters feeling that the emphasis was on obtaining good grades and that this was an unsatisfactory situation. They were also less pleased with their access to culture of the community, the warmth and friendliness of the students, acquaintance with the faculty, availability of quiet, political and social concern, counseling opportunities, and the progress they had made in a range of goals associated with college (Tables 47 and 48).

The nonpersisting Santa Barbara students categorized as below average on both dimensions were satisfied in larger percentages with tolerance for divergent ideas, quiet and privacy available (Table 48), the amount of memory work involved in courses, and their progress toward increasing their understanding of individuals with differing backgrounds and values (Table 49). This is probably best explained by the fact that low-ability students were less likely to leave because of dissatisfaction with the campus--most just couldn't make the grades.

Low-IDC nonpersisters were satisfied in larger percentages than were persisters with campus tolerance for divergence (Table 47), and with their own progress toward developing a scientific approach to problem solving, and they were less apt to feel that grades were considered much more important than studying. Again, it must be remembered that many of these individuals were academic failures. They were less apt than low-IDC persisters to be satisfied with "bull-sessions."

Apparently, for a given type of student, satisfaction was related to persistence. Also, comparison of the analyses shows that the patterns of differences between persisters and nonpersisters varied with the type of student. A second kind of analysis was performed which permitted another look at the relationship of type, specifically IDC, to satisfactions with the campus. The same pool of items was used, with possible responses ranging from very unsatisfactory to very satisfactory. The results of the above analysis for Davis persisters (Table 50) supported the notion that UC is more oriented to the average student--all but one difference was in the direction of as many or more average-IDC students expressing satisfaction than the other groups. This was not true for those who left--rather, the low-IDC individuals appeared more satisfied. Three-quarters of the differences for Low Angeles persisters (Table 51) were in the direction of more satisfied average persisters; high-IDC people were more satisfied among those who left. Most of the Santa Barbara differences for persisters supported the average-orientation notion (Table 52), with low-IDC people more satisfied among those who left.

The focus on special types of students led the investigators to look at the characteristics felt to be satisfactory by either most or none of the high-IDC people on the campuses (also for those average and low on IDC; see Appendix G). Heist (1968) noted that several of his studies indicated that large numbers of potentially creative students, students who would be found among those of above-average intellectual disposition, became dissatisfied with the college of their first choice. Their education and experiences on the campuses did not meet their expectations. Even the potential creatives who graduated complained about the inflexibility of the "system." The listing in Appendix G makes it apparent that high-IDC people on all three UC campuses were displeased with the amount of memory work required, as well as the emphasis on grades rather than learning.

Table 43

Differences in Ratings of UCLA Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very or somewhat satisfactory								
Intellectual commitment of most students	29	45	65	35	56	62	91	64
Getting acquainted with faculty	42	67	54	32	46	24	41	13
Friendliness of peers	78	60	78	83	78	58	85	85
Opportunity to meet with personnel about course work	73	80	68	51	64	45	61	47
Developing a scientific approach to problem solving	79	50	71	50	81	55	71	67

Note--Groups connected by underlining are not significantly different.

Table 44

Differences in Ratings of UCLA Characteristics by Persisters Compared to Nonpersisters by Intellectual Disposition, in Percentages

Characteristic	High		Average		Low	
	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very or somewhat satisfactory						
Getting acquainted with faculty	42	50	50	11	42	10
Opportunity for exposure to the best thinking of the ages	65	59	77	60	78	75
Developing a scientific approach to problem solving	78	64	77	51	76	63
Rated as neutral						
Individual study or research	23	14	30	29	55	18

Note--Groups connected by underlining are not significantly different.

Table 45

Differences in Ratings of UC Davis Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Rated very satisfactory								
Course work overall	24	0	26	68	44	33	50	29
Course work major	40	75	29	65	48	33	44	50
Rated as very or somewhat satisfactory								
Availability of quiet, privacy	61	0	76	59	69	55	57	82
Seriousness about studies	74	67	92	63	85	84	79	93
Furthering my appreciation of cultural and esthetic heritage	67	100	86	59	70	72	67	73
Acquaintance with faculty	77	100	78	65	78	41	69	38
Exposure to ideas that build a more comprehensive world view	76	50	80	72	89	62	83	76

Table 45 (Continued)

Differences in Ratings of UC Davis Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Rated as somewhat satisfactory								
Opportunity for pursuing cultural interests	54	67	60	62	56	31	70	58
Found much. . .								
More concern with grades than with learning	67	50	51	78	56	36	73	53

Note--Groups connected by underlining are not significantly different.

Table 46

Differences in Ratings of UC Davis Characteristics by Persisters Compared to Nonpersisters by Intellectual Disposition, in Percentages

Characteristic	IDC level					
	High		Average		Low	
	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very satisfactory						
Academic standards	44	46	54	56	8	53
Rated as very or somewhat satisfactory						
Exposure to ideas that build a more comprehensive world view	75	62	85	65	86	78
Acquaintance with faculty	78	67	78	52	79	43
Opportunity to meet with personnel about future plans	65	75	58	50	55	85
Found much. . .						
Seriousness shown toward studies	40	46	64	42	71	58

Note--Groups connected by underlining are not significantly different.

Table 47

Differences in Ratings of UC Santa Barbara Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition, in Percentages

Characteristic	IDC level High		Average		Low	
	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very satisfactory						
Self-discovery, self-insight	38	53	47	31	35	20
Balance of study to socializing among most students	24	6	25	7	23	24
Access to cultural offerings	22	6	32	14	19	15
Tolerance for divergent views, dress, behavior	43	24	46	36	28	48
Student "bull-sessions"	49	47	50	36	47	28
Rated as very or somewhat satisfactory						
Seriousness about studies	68	31	70	48	72	77
Friendliness of students	87	80	85	55	97	91
Availability of quiet, privacy	76	69	76	56	74	81
Opportunity to meet with personnel about future plans	64	45	55	32	57	55

Table 47 (Continued)

Differences in Ratings of UC Santa Barbara Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition, in Percentages

Characteristic	High		Average		Low	
	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very or somewhat satisfactory, continued						
Opportunity to meet with personnel about course work	67	62	71	54	75	71
Furthering appreciation of cultural heritage	69	56	88	57	72	72
Exposure to best thinking of the ages	80	63	83	69	75	77
Challenge to re-examine basic beliefs	75	76	86	65	76	83
Exposure to ideas that build a more comprehensive world view	84	71	91	78	70	80
Develop a scientific approach to problem solving	75	67	75	47	57	66
Preparation for occupation	69	82	68	51	59	56
Acquaintance with faculty	71	77	64	31	53	61
Involvement in political or social issues	54	54	77	50	72	83

Table 47 (Continued)

Differences in Ratings of UC Santa Barbara Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition, in Percentages

Characteristic	High		Average		Low	
	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very unsatisfactory						
Balance of concern over grades and passing exams vs. interest in learning for its own sake	22	29	15	29	16	11
Found much. . .						
Tolerance for divergent views, dress, behavior	49	29	59	42	49	59
Intellectual commitment among the students	9	6	15	4	14	17
Friendliness of students	49	24	46	26	41	33
More concern with grades than with learning	58	53	49	70	61	40

Note--Groups connected by underlining are not significantly different.

Table 48

Differences in Ratings of UC Santa Barbara Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	IDC-ability level Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Rated as very satisfactory								
Student "bull-sessions"	44	36	49	24	49	41	56	38
Self-discovery, self-insight	39	46	40	29	48	30	33	20
Balance of study to socializing among most students	31	9	19	8	28	11	22	33
Access to cultural offerings	28	9	25	18	31	11	15	10
Tolerance for divergent views, dress, behavior	39	36	32	34	50	41	27	52
Found much. . .								
Friendliness of students	42	36	43	20	47	26	37	38
More concern with grades than with learning	61	36	54	65	48	68	63	35

Table 48 (Continued)

Differences in Ratings of UC Santa Barbara Characteristics by Persisters Compared to Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Found much or some. . .								
Satisfaction with available quiet and privacy	76	64	72	86	73	58	78	100
Rated as very unsatisfactory								
Balance of concern over grades and passing exams vs. interest in learning for its own sake	17	27	22	24	13	30	17	10

Note--Groups connected by underlining are not significantly different.

Table 49

Ratings of UC Santa Barbara Characteristics as "Very" or Somewhat Satisfactory" That Differentiated Persisters and Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	IDC-ability level							
	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Preparation for occupation	73	100	64	38	68	62	53	63
Seriousness about studies	64	50	71	42	72	57	67	80
Furthering appreciation of cultural heritage	74	64	80	53	89	59	64	87
Opportunity for exposure to best thinking of the ages	77	60	78	67	85	68	70	81
Challenge to re-examine basic beliefs	77	73	79	71	88	66	63	86
Developing a scientific approach to problem solving	78	67	65	62	78	46	36	64
Acquaintance with faculty	81	86	53	41	64	33	63	71
Friendliness of students	83	78	92	75	85	53	97	94

Table 49 (Continued)

Ratings of UC Santa Barbara Characteristics as "Very" or "Somewhat Satisfactory" That Differentiated Persisters and Nonpersisters, by Intellectual Disposition-Ability Type, in Percentages

Characteristic	Both high		One average		Both average		Both low	
	Stay	Leave	Stay	Leave	Stay	Leave	Stay	Leave
Availability of quiet, privacy	74	64	77	74	76	55	74	78
Involvement in social or political issues	50	71	72	70	77	43	86	86
Opportunity to meet with personnel about course work	76	60	72	72	68	49	81	63
Opportunity to meet with personnel about future plans	74	46	50	43	52	27	56	52
Amount of memory work required	37	50	44	42	53	50	46	92
Increasing understanding of people with different backgrounds or values	71	64	78	68	82	76	61	91

Note--Groups connected by underlining are not significantly different

Table 50

Satisfaction with Characteristics of or Goals Reached at UC Davis Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Self-discovery, self-insight	40	45	24*	50	29	32
Intellectual commitment	6	13	10**	0	21	21*
Involvement in political or social issues	3	10	5***	15	15	11
Diversity among students in views, background	19	30	29*	46	27	32*
Amount of memory work	0	7	7	0	6	26*
Availability of quiet, privacy	17	29	29**	23	24	42
Furthering appreciation of cultural heritage	6	15	2***	15	12	16
Exposure to best thinking of the ages	14	16	10	8	15	37*

Table 50 (Continued)

Satisfaction with Characteristics of or Goals Reached at UC Davis Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Exposure to ideas that build a more comprehensive world view	22	31	12**	23	18	32
Preparation for occupation	14	14	36***	8	12	26

Note--Chi square analyses involved distribution from very satisfactory to very unsatisfactory. Percentages shown are those to response of very satisfactory.

*Significant at .05 level.

**Significant at .02 level.

***Significant at .01 level.

Table 51

Satisfaction with Characteristics of or Goals Reached at UCLA Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Course work in major	37	43	41***	43	35	27
Individual study	18	15	7***	23	18	32
Individual artistic or literary work	14	10	6*	10	12	9**
Intellectual commitment of most students	5	7	9***	9	12	5
Academic standards	27	46	46***	36	38	36
Tolerance for divergent views, dress, behavior	32	45	52**	55	42	46
Access to cultural offerings	65	68	58	73	63	41*
Seriousness about studies	12	12	29***	9	20	14

Table 51 (Continued)

Satisfaction with Characteristics of or Goals Reached at UCLA Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Increasing my understanding of people with different backgrounds and/or values	25	34	19**	40	27	27
Challenge to re-examine basic beliefs	22	26	19*	35	29	27

Note--Chi square analyses involved distributions from very satisfactory to very unsatisfactory. Percentages shown are those to response of very satisfactory.

*Significant at .05 level.

**Significant at .02 level.

**Significant at .01 level.

Table 52

Satisfaction with Characteristics of or Goals Reached at UC Santa Barbara Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Course work overall	35	26	33*	24	38	41
Individual artistic or literary work	19	13	5***	18	16	4***
Self-discovery, self-insight	38	47	35*	53	31	20
Balance of concern over grades and passing exams vs. interest in learning for its own sake	6	2	2	0	2	4*
Involvement in social and/or political issues	11	19	11***	24	14	11*
Tolerance for divergent views, dress, behavior	43	46	28***	24	36	48*
Access to cultural offerings	22	32	19**	6	14	15
Diversity among students in views, background, etc.	20	29	32***	24	26	22

Table 52 (Continued)

Satisfaction with Characteristics of or Goals Reached at UC Santa Barbara Which Related to Intellectual Disposition, for Persistence Groups, in Percentages

Characteristic or goal	Persisters			Nonpersisters		
	High	Average	Low	High	Average	Low
Friendliness of students	46	34	32	18	27	31**
Furthering appreciation of cultural and esthetic heritage	22	24	10***	24	18	11
Exposure to best thinking of the ages	22	17	6***	0	25	13
Exposure to ideas that build a more comprehensive world view	28	29	21***	18	23	24

Note--Chi square analyses involved distributions from very satisfactory to very unsatisfactory. Percentages shown are those to response of very satisfactory.

*Significant at .05 level.

**Significant at .02 level.

***Significant at .01 level.

IX

Intellectual Attitudes, Aptitude, and Persistence

By ascertaining the relationships between measured personality characteristics and aptitude of students and their persistence over a two-year period at three University of California campuses, this study examined the assumption that the meaning of college experiences varies for different types of individuals. It was hypothesized that students typed by ability and intellectual motivation leave UC in a nonrandom fashion, that grades are related to persistence, and that reasons for persistence and descriptions of and satisfactions with the campus environment vary with type of student.

METHOD

In the fall of 1965, entering freshmen were tested on the Davis, Los Angeles, and Santa Barbara campuses of the University of California with the Omnibus Personality Inventory (OPI) and standardized ability tests. On the basis of these scores they were assigned to a nine-cell matrix containing three levels of intellectual disposition (IDC) and three ability (top 15%, middle 70%, and bottom 15% of the tested students). Questionnaires were sent to all freshmen in the four extreme cells of the matrix and to 20 percent random samples of the remaining cells. Sophomore questionnaires were sent to all those who cooperated the first year. Persistence and achievement data were obtained from the university. Interviews were conducted with selected subsamples.

ENTERING FRESHMEN

The socioeconomic status of the sample was in the range usually described as upper middle class. More Santa Barbara students came from families with advanced education, professional standing, and high income; UCLA had the smallest proportion of such students.

Religious influence was basically Protestant, with many Los Angeles students having Jewish backgrounds. Students tended to claim fewer traditional religious beliefs for themselves than for their parents.

IDC indices, ability, and the relationship between the two, as well as average OPI scores, differed significantly between campuses and sexes, but did not warrant generalization concerning important differences in the classes entering the three campuses.

Most students were at their preferred UC campus, and had chosen it because of academic reputation, curriculum, distance from home, climate, or size.

College goals and activities which students considered important included an understanding of people with differing backgrounds, as well as self-insight, and a broadening of world outlook. Most students endorsed as important courses in general, as well as courses in their major field. The students on all campuses preferred an education which offered breadth over one giving vocational training. These considerations were related to ability and especially to intellectual disposition, with high-IDC people holding a wider range of goals than their low-IDC peers, and more of the high-IDC students planning additional formal schooling.

HOLDING POWER OF THE UNIVERSITY OF CALIFORNIA

By the spring of their second year at the University of California, approximately one-third (31%) of the students had withdrawn. By the following fall--the beginning of upper division work--more than 40 percent had left. UCLA retained its students in the greatest proportion, with 64 percent of its females remaining. Davis students who left were more likely to complete the first two years before leaving, whereas Los Angeles men were apt to leave before this time. For those who left Davis after completing the two-year lower division curriculum, the women were more likely to be of high academic ability, and the men of either high or average ability.

It was hypothesized that when ability and intellectual disposition were taken together, or intellectual disposition viewed alone, the university was oriented to the average student, and that this would be reflected in a disproportionate percentage of average students remaining on campus, compared to their peers either high or low on these dimensions. In general, this was not demonstrated. However, as might be expected, more low students left. Specifically, among the Davis sample and the Santa Barbara men, more students low on both IDC and ability left than did average but not more of the high. The Santa Barbara finding was repeated for IDC viewed alone.

Earlier research suggested the hypothesis that academic ability was related to withdrawal in a negative and linear way. The linear aspect of this was not supported, but at Davis and Santa Barbara more of those of low ability left than did those of average ability.

In short, students from Davis who were below average on both academic ability (in terms of Davis norms) and intellectual motivation (in terms of national norms) or low on the ability dimension viewed alone, were more likely than their peers to withdraw from that campus. The major reasons included academic dismissal, feelings that the courses were too grade oriented and not relevant to their lives, and having found a campus that appeared more promising in meeting their needs.

At Los Angeles, on the other hand, the whole range of types left at about the same rate, but the reasons for having done so varied with the type of student. Those low on ability or intellectual disposition were more apt to have been academically dismissed. This finding held across the total three-campus sample, but only at UCLA when the schools were examined separately.

Santa Barbara students low on the two variables, especially low-ability, low-IDC males, left in greater percentages than their UCSB peers. Santa Barbara students most clearly demonstrated that different aspects of college life would be relevant to different types, and thus the different types would have different reasons for leaving the campus. For students with above-average IDC and ability, the intellectual atmosphere--or lack of same--was frequently mentioned as detrimental to their college experience. The image of the surf and sun campus was still a very real one for them. The average nonpersisting students responded to another aspect of the same problem: For them, the interpersonal aspects of this campus were disappointing. There were complaints about the campus being too social, but also about the impersonality that accompanied it. The fact that this campus is physically apart from the town of Santa Barbara, and that most of those who technically live off-campus are adjacent to the college in an area almost totally devoted to student housing, make the nature of the social life quite important to most of the campus because it is so physically inescapable. Academic failure played a minor role in the reasons for leaving this UC campus, compared to the others.

SCHOLASTIC ACHIEVEMENT AND PERSISTENCE

The main hypothesis concerning loss of the highly intellectually oriented students was not fully confirmed. OPI indications of intellectuality did not separate persisters from nonpersisters, but the descriptions of their lives did. And it appears that those who left pursued a more intellectual life style. On one hand, those who remained on campus spent a good deal of their time with the initial requirements of a course, that is, doing the assigned reading, memorizing, learning the facts and terminology involved with a discipline. On the other hand, those who left complained about these tasks and were less apt to perform them. They seem to have spent their time in serious reading related to but not required by their courses, in preparing papers, in acquiring intellectual and artistic interests, in developing skills in analysis, synthesis, etc. The reward for time thus allotted was for many--especially at Davis and Los Angeles--failing grades. In fact, for each of the types in the 3 by 3 typology, higher grades were made by those who remained on their original campus the longest. (High school achievement was also examined in relation to college persistence, with the results being in the same direction as for college grades.) There was also a positive relation between the academic ability tests taken as entering freshmen and the cumulative college grade point average, suggesting that the students most able to handle standardized ability tests were the ones who were rewarded by the system. Intellectual interests, however, were not related to grades--an interest in ideas is not necessarily helpful in achieving at the multiversity.

To understand the differences in experiences on the campuses sustained by those who stayed and those who left, remember that among nonpersisters, some were dismissed for academic failure, but some were not. Among those dismissed were students more likely to be on the low ends of the academic ability and intellectual disposition dimensions. But reason for leaving, that is, dismissal versus nondismissal, was far from being perfectly correlated with ability or intellectual disposition. Even among those who flunked were students of strong intellectual interests and above-average ability. Perhaps these are the ones who did not bend enough to the system--who were reading outside material in addition to assigned matter when they should have been memorizing terms if they were to be rewarded by a system that apparently values the regurgitation of exercises rather than creative experiences. Perhaps, as long suspected by many, the grading process presently used by most large universities is more a measure of conformity than creativity.

CHARACTERISTICS OF PERSISTERS AND NONPERSISTERS

Iffert (1957) reported that "general dissatisfaction" accounted for most transfers from one college to another. Certainly the research reported here indicates considerable dissatisfaction on the part of those still attending the Davis, Los Angeles, and Santa Barbara campuses of the University of California, as well as those who have gone elsewhere to school, or have left college entirely. More than one-fourth of those who remained on their original campuses suspected that if they were ever to leave it would be due to discontent with the system.

On each campus, one source of discontent which stood out was the state of student relations with the faculty. It was the interpersonal and not the academic aspect which was a common source of unhappiness. The quality of teaching and the level of expertise was described as a plus factor. In fact, more than one-quarter of the students remaining on each campus stated that the faculty on their campus was a primary reason for remaining (the majority felt that this had been of some influence in keeping them there). But personal interaction with faculty was another matter. Even at the smallest campus (Davis) where theoretically the atmosphere would encourage interaction, only one-fifth of the persisters said the student-faculty relations had been influential in keeping them there.

Among the average students (in terms of intellectual motivation or academic ability), those still on the campus were even less satisfied than those who left with respect to their acquaintance with the faculty, and with their perceived opportunities to meet with them in order to discuss current work or future plans.

This dearth of stimulating one-to-one exchange outside of class between faculty and student in the experience of so many students on these campuses would be less disheartening if these young people were being sufficiently challenged by their peers. The biggest source of challenge from peers, if it were there, would come from confronting different life styles: values, behavior, attitudes which differed from those they held. In fact, the two non-city campuses have little diversity in their student bodies; ". . .most of the kids are like you are." Only at Los Angeles were most, that is, at least three-quarters, of the students satisfied with the diversity found on campus. Among all but those below average in intellectual motivation, only at UC Los Angeles were persisters and nonpersisters alike satisfied with the increase in the understanding they had gained of people different from themselves.

For the differences in life styles and values which do appear on the California campuses, insufficient tolerance and openmindedness are displayed, according to student reports. Here, too, the big city campus has the edge. For example, among those who left Santa Barbara or Davis, at least one-quarter were dissatisfied with the tolerance or openmindedness they found, compared to 7 percent of those who left Los Angeles.

For each IDC type, aspects of the campus which satisfied most (at least 75 percent) people were noted. The level of tolerance on the campuses was considered satisfactory at UCLA by the high-IDC nonpersisters, and both persisters and nonpersisters in the average and below-average IDC groups. At Santa Barbara, most of the average-IDC persisters described the tolerance there as satisfactory, as did both persisters and nonpersisters who were below average on IDC. There was no IDC type at Davis in which most perceived the level of tolerance as satisfactory.

Apparently many Davis and Santa Barbara students would welcome efforts by campus administrators to admit more students of diverse views and social backgrounds that find representation in the larger world. Since the press for admissions into our colleges increases further the ratio of faculty to students and, thus, decreases the likelihood of informal interaction between these two segments of the campus, all the more important then will be the opportunity to learn through diverse peer contact. One assumption underlying research which focuses on a particular educational institution is that retention of as many students as possible is good. While this value judgment might hold from the point of view of faculty and administration at Davis and Santa Barbara, the student seeking diversity in the backgrounds and views of peers might find more satisfaction in sampling more than one educational setting. Transferring to an entirely different setting--for example, outside California since most who enter these campuses as freshmen are Californians--could provide the challenge and broadening of perspective that students have reported after studying abroad. In working with such a program, one of the authors saw strong evidence that one of the greatest values of the year abroad was indeed the challenge it made on the students' inherited values and assumptions. It was an impetus for a thorough self-examination.

The picture presented by this report probably is too bleak. The majority of students were convinced that their underlying assumptions--those in the areas of philosophy, political/social, or religious/moral--had been challenged by the time they had completed two years of college (only 5% to 13% did not think so), and more than one-third perceived some change in their basic assumptions as a result of the challenges. Unfortunately, the data available do not allow an assessment of how thoroughgoing these challenges might have been, or how deep the changes.

Some--especially among the nonpersisters--said they would not attend their original campus had they to do it over again. Nevertheless, it is interesting to note that one-third of those still on their original campuses could not imagine transferring or leaving school, and many who were still college students listed stimulating work as a major reason for staying in college. Even at the campuses cut off from the diversity available to urban institutions, most of the students were satisfied with the discussions that took place with their peers, and with the steps they had taken toward self-understanding. There are, indeed, those people who are reasonably satisfied with their experience in this particular edition of a large state university. However, the present research, focused on the University of California, points to the problem faced by our universities today: Individuals seeking an education in these settings are not being adequately accomodated by this system. Many stay within the system, but suffer frustration. Increasingly, they are telling us about it--through their newspapers, their student-initiated courses, their rallies, their strike placards, their seized buildings. If we are serious in our desire to educate, we will listen.

Appendixes

APPENDIX A

FRESHMAN YEAR QUESTIONNAIRE, SPRING 1966

DEAR UC STUDENT:

We are asking for your assistance in a joint study between several campuses of the University of California and our Center. Since you have spent one semester on your campus, we are interested in a number of things, especially your reactions to some aspects of the University program. In the enclosed questionnaire we also ask about your background, attitudes and aspirations so that we may relate these to your perception of the University and your life on the campus.

This study is exploratory in nature, examining such areas as the effectiveness of the University in accommodating individuals with different interests and goals, the images students have of the various campuses, the characteristics of those students who remain on one UC campus as compared to those who transfer or decide not to stay in college. To complete this examination, we obviously need to ask for your cooperation again in a postcard survey at a later date.

This questionnaire is being sent to a sample of first-year students on three UC campuses. The answers which you give to this questionnaire will be confidential and will not become part of any University records; the results will be used for research purposes only. We ask for your name in order to follow your progress (such as whether you remain at UC or transfer) and to facilitate our contacting you at a later time.

Please respond to every question. Unless otherwise indicated, check *one* response for each question. Ignore the numbers in parentheses beside each question; these are used for transferrnig the information to IBM cards.

1. Name:____
last (please print) first initial

2. What was your age on December 31, 1965?

(1) 1 ______ 16 or under
2 ______ 17–18
3 ______ 19–20
4 ______ 21–22
5 ______ 23–24
6 ______ 25–26
7 ______ 27–28
8 ______ 29–30
9 ______ 31 or over

3. From what type of secondary school did you graduate?

(2) 1 ______ Public
2 ______ Parochial
3 ______ Prep or private

4. Which of the following best describes the community or home town in which you graduated from high school?

(3) 1 ______ Farm, ranch, or other open country
2 ______ Small town of less than 4,999 people
3 ______ Town of 5,000 to 9,999
4 ______ City of 10,000 to 99,999
5 ______ City of 100,000 to 499,999
6 ______ City of 500,000 or over

5. What was the name of the town or city in which you completed your secondary school education? In large cities, certain sections of the city will have a name such as the Bronx in New York City, or Hollywood in the city of Los Angeles. If the area of the city in which you lived had such a name, please indicate.

(4) Town or city____
Area of town or city____
(5) State____

6. Approximately, what was your overall grade average in high school? Regardless of the grading system used, make a letter grade estimate.

(6) 1 ______ A
2 ______ A–
3 ______ B+
4 ______ B
5 ______ B–
6 ______ C+
7 ______ C
8 ______ C– or lower

7. a) What was your approximate rank in your high school class?

(7) 1 ______ In top 2 per cent
2 ______ In top 5 per cent
3 ______ In top 10 per cent
4 ______ In top 15 per cent
5 ______ Other

b) If you know your exact rank in your high school class, please indicate:

(8)____

8. How many students were in your high school graduating class?

(9) 1 ______ 50 or less
2 ______ 51–99
3 ______ 100–199
4 ______ 200–499
5 ______ 500 or more

9. Check *any* of the following which describe your activities or attainments in high school.

(10) ______ Had speaking role in play or won recognition in speech contest
(11) ______ Wrote play which has been performed
(12) ______ Wrote scientific paper which was given at professional meeting or published in scientific journal
(13) ______ Had poem, story, article or cartoon published in public (non-high school) newspaper or magazine, or won literary award
(14) ______ Received award for individual performance in music contest
(15) ______ Received award in science fair or scientific talent search
(16) ______ Composed or arranged music which has been publicly performed
(17) ______ Art work recognized by award or invitation to exhibition
(18) ______ Was high school leader: president, editor of paper, etc.
(19) ______ Received honors in school such as Bank of America Award, Girls/Boys State Representative, etc.
(20) ______ Other things comparable to those above. Specify:________________________
____

10. Which of the following applies to you?

(21) 1 ______ Single, no steady girlfriend/boyfriend
2 ______ Single, steady girlfriend/boyfriend
3 ______ Single, engaged, planning to marry before my graduation
4 ______ Single, engaged, planning to marry after my graduation
5 ______ Single, engaged, no plans regarding marriage date
6 ______ Married
7 ______ Widowed
8 ______ Divorced or separated

11. a) What is your father's specific occupation? State exactly what he does and the kind of place where he works; for example, "sells clothes in a department store," "welder in a large aircraft factory." ***If retired, deceased, or unemployed, what was his last occupation?*** **(If stepfather in home during high school years, answer for him rather than for father.)**

(22–24)______________________________

b) Does your mother (stepmother) presently hold a job outside the home?

(25) 1 ______ No
2 ______ Yes
3 ______ Deceased
4 ______ Don't know

If yes, is she the family's main financial provider?

(26) 1 ______ No
2 ______ Yes

c) Has your mother ever held a job outside the home?

(27) 1 ______ No
2 ______ Yes

If yes, state specifically what it is/was, as you did for father.

(28–30)______________________________

12. Which of the following is closest to the religious and/or ethical values predominant in your family?

(31) 1 ______ Catholic
2 ______ Eastern religion and/or philosophy. Specify:______________________________
____
3 ______ Jewish
4 ______ Mormon
5 ______ Protestant
6 ______ Other. Specify:______________________________

If Protestant, specify denomination:

(32) ______________________________

13. Which of the following is the most appropriate term for classifying the religious faith or belief you *currently* hold?

(33) 1 ______ Agnostic
2 ______ Atheist
3 ______ Catholic
4 ______ Eastern religion and/or philosophy. Specify:______________________________
____
5 ______ Jewish. Specify subgroup:______________________________
6 ______ Mormon
7 ______ Protestant
8 ______ No religion or no formal religion
9 ______ Other. Specify:______________________________

If Protestant, specify denomination:

(34) ______________________________

14. Do you play a musical instrument?

(35) 1 ______ Frequently. Specify instrument(s): ______________________________

____

2 ______ Occasionally. Specify instrument(s): ______________________________

____

3 ______ Have studied but no longer play

4 ______ Never have played

15. In your present life, what place do art (e.g. painting, sculpturing), music, and writing hold?

	ART (36) *Check one*	**MUSIC (37)** *Check one*	**WRITING (38)** *Check one*
Little part in my life	1______	1______	1______
Source of relaxation and enjoyment	2______	2______	2______
Major and important form of activity	3______	3______	3______
Central to vocational plans	4______	4______	4______

16. What was the highest educational attainment for each parent?

	FATHER (39) *Check one*	**MOTHER (40)** *Check one*
None, or some grade school	1______	1______
Completed grade school	2______	2______
Some high school	3______	3______
Graduated from high school	4______	4______
Vocational or b [illegible]	5______	5______
Some college	6______	6______
Graduated from junior college	7______	7______
Graduated from four-year college	8______	8______
Some graduate or professional school	9______	9______
Graduate or professional degree	−______	−______
Don't know	+______	+______

17. From a political standpoint how would you describe yourself and your parents (even if deceased)?

	SELF (41) *Check one*	**FATHER (42)** *Check one*	**MOTHER (43)** *Check one*
Very liberal	1______	1______	1______
Liberal	2______	2______	2______
Moderate	3______	3______	3______
Conservative	4______	4______	4______
Very conservative	5______	5______	5______
Non-political	6______	6______	6______
Don't know	7______	7______	7______

18. What is your parents' or stepparents' approximate yearly income (after deducting business expenses)? If deceased, what *was* approximate income?

(44) 1 _____ Under $4,000
2 _____ $4,000 to $7,999
3 _____ $8,000 to $11,999
4 _____ $12,000 to $15,999
5 _____ $16,000 to $19,999
6 _____ $20,000 to $23,999
7 _____ $24,000 or over

19. In terms of your own personal satisfaction while at college, how important do you expect the following activities to be? *Rate each,* using the following scale: (1) VERY IMPORTANT; (2) SOMEWHAT IMPORTANT; (3) NEUTRAL; (4) SOMEWHAT UNIMPORTANT; (5) VERY UNIMPORTANT.

(45) _____ Course work in general
(46) _____ Course work in field of major interest
(47) _____ Individual study or research
(48) _____ Getting acquainted with faculty members
(49) _____ Student government
(50) _____ Athletics
(51) _____ "Bull-sessions" with fellow students
(52) _____ Parties and social life
(53) _____ Individual artistic or literary work
(54) _____ Self-discovery, self-insight (discovery of new interests, talents, etc.)

20. How important is it for *you* to attain the following goals during your college career? *Rate each,* using the following scale: (1) VERY IMPORTANT; (2) SOMEWHAT IMPORTANT; (3) NEUTRAL; (4) SOMEWHAT UNIMPORTANT; (5) VERY UNIMPORTANT.

(55) _____ Further my appreciation of cultural and esthetic heritage
(56) _____ Increase my understanding of people with backgrounds and/or values different from my own
(57) _____ Have the opportunity to be exposed to the best thinking of the ages
(58) _____ Be exposed to ideas which will result in having a more comprehensive world view
(59) _____ Be challenged to critically reexamine basic beliefs
(60) _____ Develop a scientific approach to problem solving

21. How do you feel about competing with other people, especially in the area of academic achievement?

(61) 1 _____ I very much dislike and prefer to avoid it.
2 _____ I dislike it somewhat.
3 _____ I have neutral feelings about this.
4 _____ I like it somewhat.
5 _____ I like it very much.

22. Which of the following reasons were most important to you in deciding *where* to go to college? Place a (1) next to the most important, (2) next to the second most important, and (3) next to the third.

(1) ______ Academic reputation of campus
(2) ______ Chance to get away from home
(3) ______ Character of the student body
(4) ______ Convenience, close to home
(5) ______ Curriculum offered
(6) ______ Family tradition
(7) ______ Having friends on campus
(8) ______ Location, climate
(9) ______ Low living expenses, chance to work
(10) ______ Low tuition, offer of scholarship
(11) ______ Rewarding social life on campus
(12) ______ Size of campus
(13) ______ Type of living facilities
(14) ______ Other. Specify: ______________________________

23. Some students feel that college is meaningless unless it offers training for an occupation; others do not consider this very important. Which *one* of the following comes closest to your view?

(15) 1 ______ The main purpose of my education is to prepare me for vocational success, and other courses are largely a waste of time.
2 ______ I want college to prepare me for a job, primarily, but I also enjoy taking some elective courses just for general interest.
3 ______ Preparation for a job is part of my reason for being in college, but I want mostly to enjoy the kind of life an education brings.
4 ______ I mainly want a good general education and will worry about the job or further training later on.

24. a) What do you think your major will be? Be as specific as possible.

(16–17) ______________________________

b) How certain are you about your major?

(18) 1 ______ Very certain
2 ______ Quite certain
3 ______ Tentative decision
4 ______ Quite uncertain
5 ______ Very uncertain

25. Which of the following will be important to you in choosing a vocation as a life's work? ***Rate each item.***

	IMPORTANT	NEUTRAL	UNIMPORTANT
(19) Above average income	1______	2______	3______
(20) Job security	1______	2______	3______
(21) Autonomy; freedom to make own decisions	1______	2______	3______
(22) Opportunity ~~to use my~~ special talents and abilities	1______	2______	3______
(23) Opportunity to be helpful to others and/or useful to society in general	1______	2______	3______
(24) Challenging work	1______	2______	3______
(25) Work which involves other people	1______	2______	3______
(26) Opportunity to make a name for self	1______	2______	3______

26. Which of the following is most in line with your educational plans for the next few years?

(27) 1 ______ Remain on this campus
2 ______ Transfer to another U.C. campus
3 ______ Transfer to another college or university
4 ______ Drop out of school before completing four years

27. What is the final level of education that you expect to attain during your life?

(28) 1 ______ A couple of years of college
2 ______ Vocational or technical degree not demanding four years of college
3 ______ Bachelor's degree
4 ______ Teaching credential
5 ______ Master's degree
6 ______ Ph.D., Ed.D.
7 ______ Professional degree (law, medicine, dentistry, etc.)
8 ______ I have no idea.

28. What level of education do/did your parents expect you to attain (whether or not this was explicitly stated)?

	FATHER (29) *Check one*	MOTHER (30) *Check one*
No demands have been made; the choice is mine	1______	1______
Some high school	2______	2______
High school diploma	3______	3______
Vocational or business school	4______	4______
Two years of college	5______	5______
Bachelor's degree	6______	6______
Some graduate or professional training	7______	7______
Graduate or professional degree	8______	8______
I don't know	9______	9______

29. In thinking about *your* future, which one of the following do you feel would be the most preferable way of life in the long run?

(31) 1 ______ An academic life (teaching, research, other scholarly work)
2 ______ A business life (employed in a business firm or industry)
3 ______ A professional life (physician, lawyer, engineer, etc.)
4 ______ A life of a trained technician or craftsman
5 ______ A life centering around some aspect of the creative arts
6 ______ A life centering around a home and a family
7 ______ Other. Specify: ______________________________
8 ______ I have not given sufficient thought to this matter to say

30. Do you have a specific vocation in mind?

(32) 1 ______ My occupational plans are still very vague and uncertain
2 ______ I am seriously considering several possibilities
3 ______ Yes

If yes, state specifically as possible what it is:
(33–35) ______________________________

31. The Free Speech Movement on the Berkeley campus during the previous school year caused considerable furor throughout the state. Assuming that you have heard and read about the FSM, which *one* of the following statements, in your thinking, comes closest to describing the majority of the participants?

(36) 1 ______ Students and non-students who belonged to Communist or Socialist organizations
2 ______ Beatniks and 'bohemians' many of whom were not students
3 ______ Disgruntled and disturbed students, most of whom had poor academic records
4 ______ Hostile and rebellious adolescents who were chiefly out to give the University trouble
5 ______ Ordinary students, of all types, who got caught up in the spirit of rioting and mob activity
6 ______ Ordinary students, of all types, who thought the University was in error in certain policies and practices
7 ______ Intelligent, serious and successful students who thought the University was in error in certain practices and policies
8 ______ Other. Specify: ______________________________
9 ______ Have not heard or read about the FSM

32. Which of the following most closely represents your thoughts and feelings about the Free Speech Movement and the participating students?

(37) 1 ______ Very much opposed and critical
2 ______ Somewhat opposed
3 ______ Neutral; no opinions or feelings
4 ______ Sympathetic and somewhat favorable
5 ______ Favorable and supportive

33. If student protest movements regarding the topics listed below were initiated on your campus during the current school year, what would be the most likely role that you would take in *each? Check one for each issue.*

	ACTIVELY INVOLVED	CONTRIBUTE FUNDS	SYMPATHETIC	NEUTRAL	OPPOSED
(38) Civil rights of minority groups	1_____	2_____	3_____	4_____	5_____
(39) Greater student involvement in setting University policy	1_____	2_____	3_____	4_____	5_____
(40) Opposition to the war in Vietnam	1_____	2_____	3_____	4_____	5_____
(41) Opposition to the Loyalty Oath	1_____	2_____	3_____	4_____	5_____
(42) Opposition to dormitory regulations	1_____	2_____	3_____	4_____	5_____
(43) Movement to promote professors on the basis of teaching skill	1_____	2_____	3_____	4_____	5_____

34. Considering the sexual mores on *your* campus, which of the following practices do you think are or would be *strongly criticized* by most students?

(44) _____ Petting and necking

(45) _____ Sexual relations between engaged couples

(46) _____ Sexual relations between dating couples

(47) _____ Sexual relations between casual acquaintances

(48) _____ Homosexual relations between consenting adults

(49) _____ None of the above

35. How satisfied are you with the opportunity you have had to meet with personnel on this campus (e.g. professors, advisors, deans, etc.) about course work and your progress, and your educational and vocational plans?

	COURSE WORK (50) *Check one*	PLANS (51) *Check one*
Extremely satisfied	1_____	1_____
Somewhat satisfied	2_____	2_____
No opinion about it	3_____	3_____
Somewhat dissatisfied	4_____	4_____
Extremely dissatisfied	5_____	5_____

36. Do you live on the campus, in the area surrounding the campus (e.g. Westwood, Isla Vista, Davis), or in a nearby town (e.g. Santa Monica, Goleta, Sacramento)?

(52) 1 _____ On the campus

2 _____ In area surrounding campus

3 _____ In nearby town

4 _____ Other

37. For each kind of problem listed on the right, check the person with whom you would be most likely to talk. For instance, if you had an academic problem, who would be the first person with whom you would discuss it—college friend, parent, etc.?

	ACADEMIC (53) *Check one*	PERSONAL, EMOTIONAL (54) *Check one*	VALUES, ETHICS (55) *Check one*	FINANCIAL (56) *Check one*
College friend or high school friend	1______	1______	1______	1______
Parents, brother, or sister	2______	2______	2______	2______
Boyfriend/girlfriend or spouse	3______	3______	3______	3______
Faculty member, advisor, or dean	4______	4______	4______	4______
Minister, rabbi, or priest	5______	5______	5______	5______
Counselor, psychologist, or psychiatrist	6______	6______	6______	6______
Other	7______	7______	7______	7______
No one	8______	8______	8______	8______

38. What kind of acquaintance do you have with the Student Counseling Center on campus? *Check any that apply.*

(57) ______ Have little or no knowledge concerning it
(58) ______ Realize that there is one on campus
(59) ______ Have read about it (handbook, catalog)
(60) ______ Have heard it discussed
(61) ______ Know the location of it
(62) ______ Have made use of it

39. Where are you living this term? *Check one.*

(63) 1 ______ College dormitory
2 ______ Fraternity or sorority house
3 ______ Cooperative
4 ______ Boarding house
5 ______ Parents' home
6 ______ Single family house
7 ______ Private room
8 ______ Private apartment
9 ______ Other

40. If finances and parental approval were not factors, where would you prefer to live? Where would you least like to live? Give numbers of choices from the list above, i.e., question 39.

(64) ______ First choice; where I would *most* like to live
(65) ______ Second choice
(66) ______ Last choice; where I would *least* like to live

41. **Regardless of whether or not you are a member of a social fraternity or sorority (or equivalent), how do you feel about them in general?**

(67) 1 ______ Strongly approve
2 ______ Moderately approve
3 ______ Indifferent
4 ______ Moderately disapprove
5 ______ Strongly disapprove
(73–78)
(80) 3

42. **Have you met with a faculty member or an advisor during this school year?**

(1) 1 ______ No
2 ______ Yes

If yes, check any reasons which apply:

(2) ______ Sign study list
(3) ______ Advise on courses for current semester or year
(4) ______ Advise on long-term college plans, such as major, or postgraduate work
(5) ______ Discuss general study problems
(6) ______ Discuss problems unrelated to course work
(7) ______ Discuss specific course work problem

43. **How satisfactory have you found the opportunities for pursuing your cultural interests on this campus?**

(8) 1 ______ Very satisfactory
2 ______ Moderately satisfactory
3 ______ Moderately unsatisfactory
4 ______ Very unsatisfactory

44. **Do you see this campus as having some special qualities that distinguish it from most other colleges and universities?**

(9) 1 ______ No
2 ______ Yes

If yes, briefly describe what you think this quality is:

(10) ____

____

45. **If you had had complete freedom of choice and had been permitted to enroll in any of the University of California branches, which *two* would have been your first (mark '1') and second (mark '2') choices?**

(11) ______ Berkeley
(12) ______ Davis
(13) ______ Irvine
(14) ______ Los Angeles
(15) ______ San Diego
(16) ______ Santa Barbara
(17) ______ Santa Cruz
(18) ______ Riverside

46. Looking back, do you think that you made the best decision by choosing to attend this campus?

(19) 1 _____ I definitely made the best decision.
2 _____ I'm pretty sure I made the best decision.
3 _____ I'm pretty sure I should have gone elsewhere.
4 _____ I definitely made a bad decision.

Approximately a year from this date we would again like to ask you about your reactions to this campus and your plans. Within a few months we would like to interview a smaller sample of students on this campus. In order to contact you at a later date, we need both your home and campus address.

School address: ______________________________
Number Street
____
City Zone State Zip Code

Permanent address: ______________________________
Number Street
____
City Zone State Zip Code

THANK YOU FOR YOUR COOPERATION

If enrolled on the Santa Barbara campus, please answer the following three items.

47. Had you heard of Isla Vista (from sources other than the Housing Office) before you came to UCSB?

(20) 1 _____ No 2 _____ Yes
If yes, did it appeal to you?
(21) 1 _____ No 2 _____ Yes 3 _____ Indifferent

48. About how many private (non-Greek) parties in Isla Vista have you gone to?

(22) 1 _____ None
2 _____ A few; not more than three
3 _____ Several; four or more

49. Why do you think most freshmen go to Isla Vista parties? Check the items you think are most important.

(23) _____ Because the 'best' social affairs are held there
(24) _____ As a curiosity
(25) _____ As a way of getting dates
(26) _____ As their major center of social life
(27) _____ As a way of meeting new people
(28) _____ As a way of getting away from the campus
(29) _____ As a way of drinking without going to a bar
(30) _____ For the opportunity to do as they please
(31) _____ Because there is nothing else to do
(32) _____ Because the most popular people go there
(73–78)
(80) 4

APPENDIX B

SOPHOMORE YEAR QUESTIONNAIRE, SPRING 1967

You may remember filling out a questionnaire which we sent you last year. We asked about your background, attitudes, and aspirations, as well as your perceptions of the University of California.

Although many different kinds of people begin their college education at UC, we do not believe all students are accommodated with equal success. Consequently, we are concerned with learning more about the different kinds of people who begin their college education at UC. So, *whether or not you are still a UC student,* we ask for your cooperation for this last year of the study. In fact, those who have left UC will probably have a unique viewpoint that will be very valuable.

As with last year's data, the questionnaire information will be kept confidential, and results will be reported in group form only. Your individual answers will be recorded with the identification number above, but your answers will not become part of any University record.

You'll note that everyone is not asked to answer all the questions. Depending on whether you are still at your original UC campus, at a different school, or not in school at all, you will be asked to answer from twenty-four to twenty-nine questions. Please try to answer each question which applies to you as accurately and completely as possible.

When the questions refer to UC, they mean the campus you entered as a freshman in the fall of 1965. Ignore the numbers in parentheses beside each question; these are used for transferring the information to IBM cards.

If your address has changed from that shown on the top of the page, please cross it out and write in the correct address.

A stamped envelope is enclosed for the return.

If you have any problems with the questionnaire, I can be contacted at the Center.

Thank you for your continued cooperation and your time.

Sincerely,

(MRS.) KATHLEEN MOCK
Assistant Project Director

____________________ **Identification No.**

QUESTIONS NUMBER 1 THROUGH 22 SHOULD BE ANSWERED BY EVERYONE

1. In one of the major focuses of this study we are very interested in following your progress through college. Check the appropriate line to indicate your status for *each* semester/quarter.

	FRESHMAN		*SOPHOMORE*
	Fall '65–66 Semester (1)	Spring '65–66 Semester (2)	Fall '66–67 Quarter (3)
Completed semester/quarter	1 ____	1 ____	1 ____
Did not complete	____	____	____
For any semester/quarter *not* completed, please check reason:			
Forced to leave by University for academic reasons	2 ____	2 ____	2 ____
Left by my own decision because of academic difficulties	3 ____	3 ____	3 ____
Left for personal reasons	4 ____	4 ____	4 ____
Forced to leave by University for disciplinary reasons	5 ____	5 ____	5 ____

2. Since you entered the University of California as a freshman in the fall of 1965, have you been enrolled in any other college or university, other than summer sessions or the UC education abroad program?

(4) 1 ____ No

2 ____ Yes; specify below:

First place attended after original UC campus:

(5–10) ____

school location dates

Presently attending (if different from original UC campus):

(11–16) ____

school location dates

(72)2

(73–79)

(80)1

3. Which of the following reasons were important in choosing the UC campus you entered as a freshman? Mark any which were PRIMARY in your decision with a ONE (1), and any which were SECONDARY with a TWO (2).

(1) ____ Academic reputation of campus

(2) ____ Chance to get away from home

(3) ____ Convenience, close to home

(4) ____ Curriculum offered

(5) ____ Location, climate

(6) ____ Low fees or living expenses; offer of scholarship

(7) ____ Character of the student body; specify ____________________

____

4. Putting finances and entrance requirements aside, as an entering freshman was ONE of the UC campuses your first choice of college or university?

(8) 1 ______ Yes
2 ______ No; specify first choice and geographical location:

(9–14) ____

5. As a freshman, did you enroll at your first choice of the UC campuses?

(15) 1 ______ Yes
2 ______ No; specify first choice:

(16) 1 ______ Berkeley
2 ______ Davis
3 ______ Irvine
4 ______ Los Angeles
5 ______ Riverside
6 ______ San Diego
7 ______ Santa Barbara
8 ______ Santa Cruz

If you did not enter your first choice of campus, why not? Check one.

(17) 1 ______ Campus filled; redirected to another campus
2 ______ Family, job commitments
3 ______ Living expenses too high
4 ______ Family disapproved of my first choice
5 ______ Family wanted me to live at home the first year
6 ______ Other

6. How satisfactory have you found UC for the pursuit of the following activities? Rate each activity.

	VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	NEUTRAL; NOT AN ACTIVITY I HAVE WANTED TO PURSUE	SOMEWHAT SATISFACTORY	VERY SATISFACTORY
(18) Course work overall	1______	2______	3______	4______	5______
(19) Course work in field of major interest	1______	2______	3______	4______	5______
(20) Individual study or research	1______	2______	3______	4______	5______
(21) Getting acquainted with faculty members	1______	2______	3______	4______	5______
(22) "Bull-sessions" with fellow students	1______	2______	3______	4______	5______
(23) Individual artistic or literary work	1______	2______	3______	4______	5______
(24) Self-discovery, self-insight (discovery of new interests, talents, etc.)	1______	2______	3______	4______	5______
(25) Course work in general education/ lower division	1______	2______	3______	4______	5______

7. Below are listed several characteristics of a campus. For the UC campus you entered as a freshman, how satisfactory have you found the situation as it exists? Check one for each characteristic.

		VERY UNSATISFACTORY	SOMEWHAT UNSATISFACTORY	NEUTRAL	SOMEWHAT SATISFACTORY	VERY SATISFACTORY
(26)	Balance of study to socializing among most students	1______	2______	3______	4______	5______
(27)	Intellectual or scholarly commitment of most students (as opposed to pure career preparation)	1______	2______	3______	4______	5______
(28)	Balance of concern over grades and passing exams versus genuine interest in learning for its own sake	1______	2______	3______	4______	5______
(29)	Amount of involvement in or concern with social and/or political issues	1______	2______	3______	4______	5______
(30)	Academic standards	1______	2______	3______	4______	5______
(31)	Tolerance for or openmindedness regarding divergent views, dress, behavior	1______	2______	3______	4______	5______
(32)	Access to cultural offerings	1______	2______	3______	4______	5______
(33)	Diversity among students in views, background, etc.	1______	2______	3______	4______	5______
(34)	Seriousness with which studies are taken	1______	2______	3______	4______	5______
(35)	Amount of memory work required in courses	1______	2______	3______	4______	5______
(36)	Warmth and friendliness of students	1______	2______	3______	4______	5______
(37)	Availability of quiet and/or privacy for study, contemplation	1______	2______	3______	4______	5______

8. People expect different things from college. For each goal listed below, rate (from 1 to 5) how satisfactory you feel UC has been in helping you to attain it:

1 VERY UNSATISFACTORY
2 SOMEWHAT UNSATISFACTORY
3 NEUTRAL, NOT A GOAL I HOLD
4 SOMEWHAT SATISFACTORY
5 VERY SATISFACTORY

(38) ______ Furthering my appreciation of cultural and esthetic heritage
(39) ______ Increasing my understanding of people with backgrounds and/or values different from my own
(40) ______ Providing the opportunity to be exposed to the best thinking of the ages
(41) ______ Being exposed to ideas which will result in having a more comprehensive world view
(42) ______ Being challenged to critically re-examine my basic beliefs
(43) ______ Developing a scientific approach to problem solving
(44) ______ Preparing me to be more effective in a chosen occupation

9. The items below refer to characteristics of the overall student body and classes at the UC campus you attended as a freshman. For each, complete the blank in the sentence by filling in one of the numbers as follows:

1 MUCH
2 SOME
3 LITTLE OR NO
4 NOT RELEVANT

Rate each according to your own individual experiences on that campus.

(45) There is _____ tolerance for divergent views, dress, behavior.
(46) Study is _____ more important than socializing.
(47) There is _____ intellectual commitment among the students.
(48) There is _____ more concern with grades than with learning.
(49) There is _____ diversity in student views, backgrounds, etc.
(50) _____ seriousness is shown toward studies.
(51) _____ memory work is involved in classes.
(52) _____ warmth and friendliness is shown by students.
(53) _____ satisfaction is felt about the ease with which quiet and privacy are available.

10. How accurate were the notions you held concerning the UC campus you entered as a freshman? Check one for each characteristic.

	FOUND WHAT I EXPECTED	MORE/GREATER THAN EXPECTED	LESS/LOWER THAN EXPECTED	HAD NO IDEA WHAT TO EXPECT	HAD NEVER GIVEN IT ANY THOUGHT
(54) Amount of studying in relation to socializing	1_____	2_____	3_____	4_____	5_____
(55) Intellectual commitment of most students	1_____	2_____	3_____	4_____	5_____
(56) Genuine interest in learning for its own sake	1_____	2_____	3_____	4_____	5_____
(57) Involvement in or concern with social/political issues	1_____	2_____	3_____	4_____	5_____
(58) Academic standards	1_____	2_____	3_____	4_____	5_____
(59) Tolerance for or openmindedness concerning divergent views, dress, behavior	1_____	2_____	3_____	4_____	5_____
(60) Access to cultural offerings	1_____	2_____	3_____	4_____	5_____
(61) Diversity among students in views, backgrounds, etc.	1_____	2_____	3_____	4_____	5_____
(62) Seriousness with which studies are taken	1_____	2_____	3_____	4_____	5_____
(63) Memory work required in courses	1_____	2_____	3_____	4_____	5_____
(64) Warmth and friendliness of students	1_____	2_____	3_____	4_____	5_____
(65) Availability of quiet or privacy for study, contemplation	1_____	2_____	3_____	4_____	5_____

11. If you had known all that you now know about the University of California, would you still have enrolled at the UC campus you entered as a freshman?

(66) 1 ______ Definitely not
2 ______ Probably not
3 ______ Maybe yes
4 ______ Definitely yes

12. A year ago you were asked to choose one of the following responses to represent your thoughts and feelings concerning the Free Speech Movement on the Berkeley campus in 1964. How do you feel now?

(67) 1 ______ Very much opposed and critical
2 ______ Somewhat opposed
3 ______ Neutral; no opinions or feelings
4 ______ Sympathetic and somewhat favorable
5 ______ Favorable and supportive

13. From a political standpoint how would you describe your thinking and attitudes at this time?

(68– 01 ______ Radical Left
69) 02 ______ Very Liberal
03 ______ Liberal
04 ______ Moderate
05 ______ Conservative
06 ______ Very Conservative
07 ______ Radical Right
08 ______ Anarchistic
09 ______ Non-political
10 ______ Other

14. We are interested in what may or may not have happened to your social-political, or philosophical-religious-moral values since high school. Check the one statement which comes closest to your situation.

(70) 1 ______ When I entered college the values I held had been assimilated from my culture with little questioning; still, the experiences and maturation which have taken place since entering college have not led to the formation of a personal set of values.

2 ______ When I entered college the values I held had been assimilated from my culture with little questioning, but the experiences and maturation which have taken place since entering college have led me to examine social-political, or philosophical-religious-moral issues, and to begin building a value system which is truly my own.

3 ______ When I entered college the values I held had been assimilated from my culture with little questioning, but the experiences and maturation which have taken place since entering college have led me to examine social-political, or philosophical-religious-moral issues, and I feel I now have a value system which is truly my own.

4 ______ I entered college with a set of values which was truly my own; the experiences and maturation which have taken place since entering college have had little impact upon my personal set of values.

5 ______ I entered college with a set of values which was truly my own; the experiences and maturation which have taken place since entering college have led me to re-examine social-political, or philosophical-religious-moral issues, but I have not rejected any of my values as a result of this examination.

6 ______ I entered college with a set of values which was truly my own; the experiences and maturation which have taken place since entering college have led me to re-examine social-political, or philosophical-religious-moral issues, and I find that some of my former values are likely to be changed or discarded.

(72)2

(73–79)

(80)2

15. Below are listed several items which are related to child rearing techniques, especially in the areas of restrictions, regulations and pressures which parents place on their children's behavior. Using the words at the end of each scale as guides, rate your home on each scale as you remember it during your *high school* years. For each scale, make a check in one of the columns.

		Very	Somewhat	Neutral	Somewhat	Very	
		1	2	3	4	5	
(1) Were policies concerning your behavior usually decided in an autocratic or democratic fashion?	autocratic	______	______	______	______	______	democratic

		Very 1	Somewhat 2	Neutral 3	Somewhat 4	Very 5	
(2) When policies concerning your behavior were communicated to you, were the reasons for them usually arbitrary or rational?	arbitrary	____	____	____	____	____	rational
(3) Could you challenge and alter the policies concerning your behavior?	yes	____	____	____	____	____	no
(4) How restrictive were regulations of your behavior?	free	____	____	____	____	____	restrictive
(5) When parents/guardians made suggestions concerning your education/vocation/career was it optional or mandatory that you follow them?	optional	____	____	____	____	____	mandatory
(6) When suggestions were made concerning ethical/philosophical/political positions, did you have to follow them?	optional	____	____	____	____	____	mandatory
(7) When your parents had a strong position concerning personal/behavioral/moral matters, did you have to follow their rules?	optional	____	____	____	____	____	mandatory
(8) When rules or regulations were broken, were your parents lax or vigilant in taking action (regardless of what that action was)?	lax	____	____	____	____	____	vigilant
(9) When penalties were given for broken rules or regulations, were your parents usually mild or severe in the penalties they gave you?	mild	____	____	____	____	____	severe
(10) When penalties were given for broken rules or regulations, were they usually educational or punitive?	punitive	____	____	____	____	____	educational
(11) Concerning your behavior, did you feel that what your parents expected was usually vague or clear?	vague	____	____	____	____	____	clear

16. The following question provides a list of scales made up of paired terms that are to be judged in relation to a concept. Place a mark on the scale within the space which, in your judgment, best describes or rates the concept in question. Be sure to check every scale—*do not omit any* even though a pair of terms seems unrelated to the concept. Make each scale item a separate and independent judgment. Make your judgments quickly without concern for consistency.

EXAMPLE:

MUSIC IS:

Enjoyable	×							Unenjoyable
Civilized				×				Primitive
Bad					×			Good
Abstract		×						Concrete

In the above example, the concept *MUSIC* was rated as being extremely enjoyable, neither civilized nor primitive, slightly good, and quite abstract.

STUDENTS WHO ARE BASICALLY *SATISFIED* WITH THEIR EDUCATIONAL EXPERIENCES ON THIS CAMPUS ARE:

		1	2	3	4	5	6	7	
(12)	Cautious								Rash
(13)	Ambitious								Unambitious
(14)	Bad								Good
(15)	Careless								Thorough
(16)	Soft								Hard
(17)	Serene								Anxious
(18)	Heretical								Orthodox
(19)	Nonintrospective								Introspective
(20)	Opportunistic								Principled
(21)	Assertive								Nonassertive
(22)	Tenacious								Yielding
(23)	Disorganized								Organized
(24)	Excitable								Calm
(25)	Persevering								Distractible
(26)	Childish								Mature
(27)	Unsuccessful								Successful
(28)	Conforming								Rebellious
(29)	Feminine								Masculine
(30)	Passive								Active
(31)	Deliberate								Impulsive
(32)	Rigid								Flexible

STUDENTS WHO ARE BASICALLY *DISSATISFIED* WITH THEIR EDUCATIONAL EXPERIENCES ON THIS CAMPUS ARE:

		1	2	3	4	5	6	7	
(33)	Cautious								Rash
(34)	Ambitious								Unambitious
(35)	Bad								Good
(36)	Careless								Thorough
(37)	Soft								Hard
(38)	Serene								Anxious
(39)	Heretical								Orthodox
(40)	Nonintrospective								Introspective
(41)	Opportunistic								Principled
(42)	Assertive								Nonassertive
(43)	Tenacious								Yielding
(44)	Disorganized								Organized
(45)	Excitable								Calm
(46)	Persevering								Distractible
(47)	Childish								Mature
(48)	Unsuccessful								Successful
(49)	Conforming								Rebellious
(50)	Feminine								Masculine
(51)	Passive								Active
(52)	Deliberate								Impulsive
(53)	Rigid								Flexible

17. It has recently been said, as people look critically at the college years, that they should contain *five* focuses, not just one. How important and central to the college years do you feel the following focuses are? Rate each from 1 to 5 as follows:

1 VERY UNIMPORTANT
2 SOMEWHAT UNIMPORTANT
3 NOT RELEVANT TO COLLEGE
4 SOMEWHAT IMPORTANT
5 VERY IMPORTANT

(54) ______ **THE OPPORTUNITY FOR CONCEPTUAL LEARNING; learning about ideas and concepts in classroom, reading and discussion.**

(55) ______ **THE OPPORTUNITY FOR IMAGINATIVE LEARNING; learning about oneself and the human condition through experiences, verbal and non-verbal, in the humanities and the arts.**

(56) ______ **THE OPPORTUNITY FOR WORK LEARNINGS; learning about oneself and the world in real-life context through part-time work, or alternate periods of work and classroom.**

(57) ______ **THE OPPORTUNITY FOR LEARNINGS IN THE AREAS OF SOCIAL AND MORAL OR VALUE COMMITMENT; learning about oneself and the world in programs in the areas of social need or action in this country, *and* opportunities in other cultures.**

(58) ______ **THE OPPORTUNITY FOR PERSONAL INTEGRATION OF THE ABOVE LEARNINGS; learning about and forming oneself in discussions, personal or group, with peers or members of another generation, faculty, counselors, etc.**

(59) ______ **OTHER; if you feel there are other focuses relevant to the college years, please specify and rate** ______________________________

____

____

18. Check the person to whom you would be most likely to turn for assistance, guidance, or counsel in the following areas (as described in the previous question): 1) CONCEPTUAL LEARNING, 2) IMAGINATIVE LEARNING, 3) WORK LEARNINGS, 4) LEARNINGS IN THE AREAS OF SOCIAL AND MORAL OR VALUE COMMITMENT, 5) PERSONAL INTEGRATION OF THE ABOVE LEARNINGS. For each kind of learning listed on the right, check the person to whom you would be most likely to turn for assistance.

	(60) CONCEPTUAL check one	(61) IMAGINATIVE check one	(62) WORK check one	(63) SOCIAL-MORAL check one	(64) PERSONAL INTEGRATION check one

19. What magazines do you read regularly or often? Check as many as apply.

(1) ______ Commentary, Literary and Political (Atlantic Monthly, New York Review of Books, Commentary, Harper's, Commonweal, National Review, Modern Age, New Republic, Ramparts, New Yorker, Saturday Review, New York Times Magazine, etc.)

(2) ______ Humor and Satire (Mad, Realist, campus humor magazines, etc.)

(3) ______ News Magazines (Newsweek, Time, U.S. News and World Report, National Observer, The Economist, etc.)

(4) ______ Popular-Pictorial, and Digests (Life, Look, Saturday Evening Post, Reader's Digest, Coronet, Pageant, etc.)

(5) ______ Men's Magazines (Esquire, Playboy, Cavalier, etc.)

(6) ______ Popular Fashion, Homemaking, Travel (Charm, Seventeen, Vogue, Better Homes and Gardens, Cosmopolitan, Good Housekeeping, McCall's, Holiday, Venture, etc.)

(7) ______ Cultural and Scientific (American Art, American Heritage, Horizon, National Geographic, Scientific American, Theatre Arts, etc.)

(8) ______ Detective, Movie, Romance, Science Fiction

(9) ______ Business (Business Week, Forbes, Fortune, Wall Street Journal, etc.)

(10) ______ Occupational and Professional Journals (academic, educational, engineering, farm, legal, medical, trade, psychiatric, etc.)

(11) ______ Hobby and Sports (Aviation Week, Boating, Downbeat, High Fidelity, Popular Science, Popular Electronics, Sports Illustrated, Strength and Health, etc.)

(12) ______ Other; specify ________________________________

20. Estimate the number of *non-class required* books you read *per quarter* during school sessions. Make one estimate for each type of book listed.

	0	1–2	3–4	5–6	7–8	9 or more
(13) History, politics, economics and world affairs	1____	2____	3____	4____	5____	6____
(14) Religion and philosophy	1____	2____	3____	4____	5____	6____
(15) Behavioral Sciences (Sociology, Psychology, Anthropology, etc.)	1____	2____	3____	4____	5____	6____
(16) Cultural (Art, Architecture, Music, Photography, etc.)	1____	2____	3____	4____	5____	6____
(17) Technical, Scientific and Reference	1____	2____	3____	4____	5____	6____
(18) Biographies and Historical Fiction	1____	2____	3____	4____	5____	6____
(19) Detective, Science Fiction, Western, Romance	1____	2____	3____	4____	5____	6____
(20) Plays	1____	2____	3____	4____	5____	6____
(21) Poetry	1____	2____	3____	4____	5____	6____
(22) Novels and Short Story Anthologies	1____	2____	3____	4____	5____	6____
(23) Literary Criticism	1____	2____	3____	4____	5____	6____
(24) Other	1____	2____	3____	4____	5____	6____

21. Using the latest month you've spent in school for a reference point, estimate the hours *per week* you have spent on each activity listed. Make one estimate for each activity.

	HOURS PER WEEK						
ACTIVITIES DIRECTLY RELATED TO CLASS WORK	0	1–4	5–8	9–12	13–16	17–20	21 or more
(25) Reading required material the first time	1____	2____	3____	4____	5____	6____	7____
(26) Rereading, reviewing, studying, memorizing class material	1____	2____	3____	4____	5____	6____	7____
(27) Talking to teachers outside of class	1____	2____	3____	4____	5____	6____	7____
(28) Attending classes	1____	2____	3____	4____	5____	6____	7____
(29) Preparing papers, essays	1____	2____	3____	4____	5____	6____	7____
(30) Talking with other students about course material	1____	2____	3____	4____	5____	6____	7____
(31) Reading course related but unrequired material	1____	2____	3____	4____	5____	6____	7____
ACTIVITIES NOT RELATED TO CLASS WORK							
(32) Reading material primarily for enjoyment	1____	2____	3____	4____	5____	6____	7____
(33) Engaging in student government activities	1____	2____	3____	4____	5____	6____	7____
(34) Working on community service projects, attending marches or rallies, engaging in other political/social activities	1____	2____	3____	4____	5____	6____	7____
(35) "Tripping" with or without drugs	1____	2____	3____	4____	5____	6____	7____
(36) Engaging in religious activities	1____	2____	3____	4____	5____	6____	7____
(37) Engaging in bull-sessions on values, morals, philosophy of life, political/social issues	1____	2____	3____	4____	5____	6____	7____
(38) Dancing (non-social)	1____	2____	3____	4____	5____	6____	7____
(39) Singing in choir, glee club, etc.	1____	2____	3____	4____	5____	6____	7____
(40) Going to art exhibits	1____	2____	3____	4____	5____	6____	7____
(41) Working on painting, sculpture, pottery, etc.	1____	2____	3____	4____	5____	6____	7____
(42) Attending concerts, listening to music (not as background)	1____	2____	3____	4____	5____	6____	7____

	HOURS PER WEEK						
	0	1–4	5–8	9–12	13–16	17–20	21 or more
(43) Playing musical instrument, composing music	1____	2____	3____	4____	5____	6____	7____
(44) Writing prose, poetry	1____	2____	3____	4____	5____	6____	7____
(45) Attending plays, poetry readings	1____	2____	3____	4____	5____	6____	7____
(46) Solitary contemplation	1____	2____	3____	4____	5____	6____	7____
(47) Attending lectures	1____	2____	3____	4____	5____	6____	7____
(48) Serious reading	1____	2____	3____	4____	5____	6____	7____

22. Below are listed educational objectives held by some. Please rate each on how much progress you feel you have made toward reaching it, using the following scale:

1 MUCH PROGRESS
2 SOME PROGRESS
3 LITTLE OR NO PROGRESS
4 NOT A GOAL I HOLD

(49) ______ Specific knowledge or memory of specifics in a field, such as terminology or trends

(50) ______ Specific knowledge or memory of the universals and abstractions in a field

(51) ______ Ability to comprehend or interpret, or to extrapolate from knowledge

(52) ______ Ability to apply abstractions or principles to particular situations

(53) ______ Skill in analysis of information into elements, relationships, etc.

(54) ______ Ability to synthesize, i.e., put together parts to form a whole, such as in a term paper

(55) ______ Ability to evaluate material and methods

(56) ______ Genuine interest in intellectual matters

(57) ______ Genuine interest in artistic matters

(58) ______ Formulation of ethical standards

(59) ______ General understanding of scientific method

(60) ______ Developing greater insight into and understanding of myself

(61) ______ Developing greater insight into and understanding of mankind

TO BE ANSWERED BY THOSE NOT ENROLLED IN ANY SCHOOL. OTHERS GO ON TO #24.

23. If you are not currently enrolled in school, do you plan to continue or complete your education at some future time?

(62) 1 ____ No
2 ____ Yes; specify when and where:

WHEN

(63) 1 ____ Within next two years
2 ____ Within next five years
3 ____ Later than five years from now
4 ____ Uncertain

WHERE

(64) 1 ____ Original UC campus
2 ____ Another UC campus
3 ____ A different college or university

(72) 2
(73–79)
(80) 4

IF YOU HAVE EVER WITHDRAWN FROM YOUR ORIGINAL UC CAMPUS (WHETHER OR NOT YOU RETURNED TO THAT CAMPUS), PLEASE ANSWER THIS QUESTION. OTHERS GO ON TO #25.

24. If you have *not been continuously enrolled* at the UC campus you entered as a freshman, please answer this. Which of the following reasons were important in your decision to leave? Please mark any reasons which might be PRIMARY with a ONE (1), and any which might be SECONDARY with a TWO (2). Leave irrelevant reasons blank.

ACADEMIC

(1) ____ Forced out by University because of grades
(2) ____ Forced out by University for disciplinary reasons
(3) ____ Dissatisfied with curriculum and/or selection of courses
(4) ____ Dissatisfied with competence of staff
(5) ____ Dissatisfied with teaching conditions and methods (e.g., class size, video lectures, etc.)
(6) ____ Inadequate facilities (e.g., library, language labs, etc.)
(7) ____ Left by own choice because of grades or concern over what grades would be
(8) ____ Too competitive and/or grade oriented
(9) ____ Not sufficiently competitive
(10) ____ Atmosphere too intellectual
(11) ____ Atmosphere not intellectual enough
(12) ____ Dissatisfied with student-faculty relations
(13) ____ University too structured to allow for self-expression, individuality, creativity
(14) ____ Course work not related to the reality of my life
(15) ____ Have obtained academic satisfaction I was seeking; did not plan to seek bachelor's degree
(16) ____ Pace too fast to allow becoming steeped in particular academic interest; no time for valid scholarly pursuit
(17) ____ Quarter system

PERSONAL

(18) ______ Present school better suits my educational and/or vocational interests
(19) ______ Job offer too good to pass up (private business, military service, etc.)
(20) ______ Wanted to travel
(21) ______ Wanted a break in education
(22) ______ Preferred to find intellectual activity outside of formal educational institutions
(23) ______ Campus too politically oriented
(24) ______ Campus not sufficiently political in orientation
(25) ______ Too socially oriented
(26) ______ Not sufficiently socially oriented
(27) ______ Atmosphere too impersonal
(28) ______ Atmosphere not impersonal enough; insufficient privacy and/or anonymity
(29) ______ Felt lonely, isolated; hard to make friends
(30) ______ Emotional or psychiatric problems interfered with school work
(31) ______ Got too involved in outside activities
(32) ______ Not sure what I want to do in life; was just following the herd until now

CIRCUMSTANTIAL

(33) ______ Health
(34) ______ Change in finances
(35) ______ Drafted
(36) ______ Left school *in order* to get married or have baby
(37) ______ Change in family circumstances

OTHER

(38) ______ Other, specify ____
____

TO BE ANSWERED ONLY BY THOSE STILL ENROLLED IN *ANY* SCHOOL. THIS IS END OF QUESTIONNAIRE FOR THOSE NOT CURRENTLY IN SCHOOL. THANK YOU FOR YOUR COOPERATION.

25. Which one of the categories below comes closest to your intended academic major?

(39) 1 ______ *Engineering*
2 ______ *Physical Science* (e.g., applied natural sciences, astronomy, chemistry, dental technician, earth sciences, geology, geophysics, math, medical technician, meteorology, mineralogy, natural sciences, nursing, oceanography, paleontology, physical sciences, physics, pre-dental, pre-medical, pre-pharmacy, public health, statistics, etc.)
3 ______ *Biological Science* (e.g., anatomy, bacteriology, biochemistry, biophysics, botany, genetics, marine biology, micro-biology, physiology, zoology, etc.)
4 ______ *Social Science* (e.g., anthropology, business administration, criminology, economics, education, geography, history, interdepartmental major, Near Eastern studies, physical education, political science, pre-law, psychology, social welfare, sociology, etc.)
5 ______ *Humanities* (e.g., creative writing, English, journalism, languages, library science, linguistics, literature, philosophy, religion, speech, etc.)
6 ______ *Fine Arts* (e.g., architecture, art, dance, design, drama, motion picture, theatre arts, T-V-radio, etc.)
7 ______ *Agriculture* (e.g., agriculture economics, agriculture education, agriculture production, animal science, entomology, food science and technology, home economics, irrigation sciences, nutritional science, parasitology, pre-forestry, pre-veterinary medicine, plant science, range management, soil science, etc.)
8 ______ *Undecided*

26. Specifically, what do you think your major will be?

____

27. In the organization of your day to day school life, how much of each of the following would you like? For each item listed, would you like most or a predominant amount of your time organized to allow for this, or would you prefer to have the item as a supplement to your usual work, or would you prefer to have very little or none of this in your schedule? Check one for each item.

	PREDOMINANCE	SUPPLEMENT	VERY LITTLE OR NONE
(40) Independent reading and writing; setting own tasks	1_____	2_____	3_____
(41) Class work, class assignments, regular examinations, etc.	1_____	2_____	3_____
(42) Research and preparation of reports on findings; work independent, but task assigned	1_____	2_____	3_____
(43) Exploration of various academic areas	1_____	2_____	3_____
(44) Specialization in one or two academic areas	1_____	2_____	3_____
(45) Small group discussions, seminars	1_____	2_____	3_____
(46) Access to teachers, research personnel on a non-structured basis	1_____	2_____	3_____

28. If you are still a college student, no matter what college, which of the following reasons have been important in your decision to stay in school? Please mark any reasons which might be PRIMARY with a ONE (1), and any which might be SECONDARY with a TWO (2). Leave irrelevant reasons blank.

(47) _____ College work stimulating or satisfying
(48) _____ Particularly satisfied with intellectual atmosphere
(49) _____ Much opportunity for self-expression, individuality, creativity
(50) _____ College work is very related to the reality of my life
(51) _____ Importance of obtaining a college degree
(52) _____ Particularly satisfied with social aspect
(53) _____ Particularly satisfied with political aspect
(54) _____ Great satisfaction from extracurricular activities
(55) _____ Good place to meet kind of people with whom I wish to associate
(56) _____ No better alternative available
(57) _____ Way of postponing decision about what I want to do in life
(58) _____ Just never seriously considered dropping out of school
(59) _____ Would probably be drafted if not in school
(60) _____ Pressure from family to remain in school
(61) _____ Other; specify _______________________________________

29. Check the one statement which most closely describes your relationship to the UC campus you entered as a freshman.

(62) 1 ____ I have seldom or never given serious consideration to dropping out or transferring to another college.

2 ____ I have occasionally thought about dropping out or transferring to another college but the advantages of remaining have always outweighed the advantages of leaving.

3 ____ I have often seriously considered dropping out or transferring to another college and have come close to deciding to do so.

4 ____ I have dropped out or transferred, but have returned.

5 ____ I have dropped out of or transferred from the UC campus I first entered, and am still away from that campus.

(72) 2

(73–79)

(80) 5

THE REMAINDER OF THE QUESTIONS ARE TO BE ANSWERED ONLY BY THOSE STUDENTS STILL ENROLLED IN THE UC CAMPUS THEY ENTERED AS FRESHMEN.

30. If you should not graduate from *this* college, what do you think would be the most likely reasons? Please mark any reasons which might be PRIMARY with a ONE (1), and any which might be SECONDARY with a TWO (2). Leave irrelevant reasons blank.

(1) ____ Can't imagine not graduating from this college

(2) ____ Poor grades, too much academic pressure

(3) ____ No personal reason to be here yet

(4) ____ No goals that make all the work worthwhile

(5) ____ College irrelevant to main interests, concerns

(6) ____ Health, physical or emotional

(7) ____ Marriage, pregnancy

(8) ____ Financial reasons, employment

(9) ____ Professional or technical school

(10) ____ College with a better program

(11) ____ Disinterest in completing four years at this time

(12) ____ Able to achieve the personal and intellectual goals I'm seeking in college in less than four years

(13) ____ Parental dissatisfaction with the University of California

(14) ____ Discontent with the system

(15) ____ Other; specify ____________________

31. With all the concern over why students transfer out of a particular college or university, we must not lose sight of those who *do not leave.* If you are still enrolled at the UC campus you entered as a freshman, which of the following reasons have been important in your decision to *stay at UC?* Please mark any reasons which might be PRIMARY with a ONE (1), and any which might be SECONDARY with a TWO (2). Leave irrelevant reasons blank.

ACADEMIC

(16) _____ Course work stimulating or satisfying
(17) _____ Very satisfied with curriculum or selection of courses
(18) _____ Very satisfied with some or all of faculty
(19) _____ Superior facilities (e.g., library, language lab, etc.)
(20) _____ Superior teaching methods or conditions (e.g., small classes, seminars, etc.)
(21) _____ Particularly satisfied with level of competition
(22) _____ Particularly satisfied with intellectual atmosphere
(23) _____ Particularly satisfied with student-faculty relations
(24) _____ Attractive opportunity for research
(25) _____ UC allows opportunity for self-expression, individuality, creativity
(26) _____ Courses very much related to the reality of my life, to my real concerns
(27) _____ Not able to get accepted into school I prefer

PERSONAL

(28) _____ Particularly satisfied with social atmosphere
(29) _____ Particularly satisfied with political atmosphere
(30) _____ Am being well prepared for chosen vocation
(31) _____ Very satisfied with extracurricular activities
(32) _____ Good campus for meeting kinds of people with whom I wish to associate
(33) _____ Just never considered transferring
(34) _____ Not able to afford school I prefer

OTHER

(35) _____ Other; specify____
____

(72) 2
(73–79)
(80) 6

APPENDIX C

OMNIBUS PERSONALITY INVENTORY (FORM F)

BRIEF SCALE DESCRIPTIONS

Thinking Introversion (TI): Persons scoring high on this measure are characterized by a liking for reflective thought and academic activities. They express interests in a broad range of ideas and in a variety of areas, such as literature, art and philosophy. Their thinking is less dominated by objective conditions and generally accepted ideas than that of thinking extroverts (low scorers). Most extroverts show a preference for overt action and tend to evaluate ideas on the basis of their practical, immediate application.

Theoretical Orientation (TO): This scale measures an interest in, or orientation to, a more restricted range of ideas than is true of TI. High scorers are interested in science and in some scientific activities, including a preference for using the scientific method in thinking. They are generally logical, analytical, and critical in their approach to problems.

Estheticism (Es): High scorers endorse statements indicating diverse interests in, as well as an appreciation of, artistic matters and activities. The focus of their interests tends to extend beyond painting, sculpture and music and includes interests in literature and dramatics.

Complexity (Co): This measure reflects an experimental orientation rather than a fixed way of viewing and organizing phenomena. High scorers are tolerant of ambiguities and uncertainties; they are generally fond of novel situations and ideas. Most high scorers very much prefer to deal with diversity and complexity, as opposed to simplicity and structure, and are disposed to seek out and enjoy unusual ambiguous events and experiences.

Autonomy (Au): The characteristic measured is composed of non-authoritarian attitudes and a need for independence. High scorers are sufficiently independent of authority, as traditionally imposed through social institutions, that they oppose infringements on the rights of individuals. They are tolerant of viewpoints other than their own, and they are nonjudgmental, realistic, and intellectually liberal.

Religious Orientation (RO): High scorers are skeptical of conventional religious beliefs and practices and tend to reject most of them, especially those that are orthodox or fundamentalistic in nature. Persons scoring near or above the mean are manifesting a liberal view of religious beliefs, and low scorers tend to be conservative in general and rejecting of other viewpoints. (The direction of scoring on this scale, with strong religious commitment indicated by low scores, was determined in part by the correlation between these items and the first four scales which together measure a general intellectual disposition.)

Social Extroversion (SE): This measure reflects a preferred style of relating to people in a social context. High scorers, displaying a strong interest in being with people, seek social activities and gain satisfaction from them. The social introvert (low scorers) tends to withdraw from social contacts and responsibilities.

Impulse Expression (IE): This scale assesses a general readiness to express impulses and to seek gratification either in conscious thought or in overt action. High scorers have an active imagination, value sensual reactions, and their thinking and behavior has pervasive overtones of feelings and fantasies.

Personal Integration (PI): The high scorer admits to few attitudes and behaviors that characterize anxious, disturbed or socially alienated persons. Low scorers on the other hand, may intentionally avoid others and often express hostility and aggressions. They also indicate feelings of loneliness, rejection, and isolation.

Anxiety Level (AL): High scorers deny that they have feelings or symptoms of anxiety and do not admit to being nervous or worried. Low scorers are generally tense and high-strung and often experience some difficulty adjusting in their social environment.

Altruism (Am): The high scorer is an affiliative person and trusting in his relations with others. He exhibits concern for the feelings and welfare of people he meets. Low scorers tend to be much less concerned about the welfare of others and often view people from an impersonal, distant perspective.

Practical Outlook (PO): The high scorer on this measure is interested in practical, applied activities and tends to value material possessions and concrete accomplishments. The criterion most often used to evaluate ideas and things is one of immediate utility. Authoritarianism, conservatism and non-intellectual interests are very frequent personality components of persons scoring above the average.

Masculinity-Femininity (MF): This scale assesses some of the differences in attitudes and interests between college men and women. High scorers (masculine) deny interests in esthetic matters and they admit to few adjustment problems, feelings of anxiety, or personal inadequacies. They also tend to be somewhat less socially inclined than low scorers and more interested in scientific matters. Low scorers (feminine), besides stronger esthetic and social inclinations, also admit to greater sensitivity and emotionality.

Response Bias (RB): This measure represents an approach to assessing the students' test-taking attitude. High scorers are responding to this measure in a manner similar to a group of students who were explicitly asked to make a good impression by their responses to these items. Low scorers, on the contrary, may be trying to make a bad impression.

APPENDIX D

INTELLECTUAL DISPOSITION CATEGORY CALCULATION FROM OMNIBUS PERSONALITY INVENTORY, FORM F[a]

	Criteria				
Category	Average TI, TO, ES, CO	TI and TO	TI or TO	Au or RO	If criteria not met; try category:
1	>64[b]	>59	>69	>59	2
2	>61	>54	>64	>54	3
3	>57	>49	>59	>49	4
4	>53		>54	>44	5
5	>47		>49	>44	6
6	>41	<55		<55	5
7	>37		<46		6
8	<38	<41			7

[a] System formulated by Paul Heist and George Yonge and programmed for computer by Carol Treanor, Center for Research and Development in Higher Education, University of California, Berkeley.

[b] In standard scores.

APPENDIX E

CHARACTERISTICS OF STUDENTS BY FRESHMAN DECLARED ACADEMIC MAJOR

Table E-1

Intellectual Disposition and Academic Ability of Freshmen in Various Academic Majors

Major	High		Average		Low		Total	
	N	%	N	%	N	%	N	%
Engineering								
IDC	7	15	26	54	15	31	48	100
Ability	15	31	29	61	4	8	48	100
Physical sciences								
IDC	42	18	134	57	58	25	234	100
Ability	69	30	115	49	50	21	234	100
Biological sciences								
IDC	24	18	77	60	28	22	129	100
Ability	35	27	76	59	18	14	129	100
Social sciences								
IDC	94	16	309	53	179	31	582	100
Ability	116	20	293	50	173	30	582	100
Humanities								
IDC	65	27	122	51	52	22	239	100
Ability	83	35	112	47	44	18	239	100
Fine arts								
IDC	22	26	48	57	14	17	84	100
Ability	14	17	49	58	21	25	84	100
Agriculture								
IDC	1	2	22	48	23	50	46	100
Ability	4	9	22	48	20	43	46	100
Undecided								
IDC	13	16	41	50	28	34	82	100
Ability	22	27	42	51	18	22	82	100

Appendix E (Continued)

Table E-2

Raw Score Means and Standard Deviations of Intellective Scales of the Omnibus Personality Inventory, Form F, for Male Freshmen at Three University of California Campuses[a] by Academic Major

Major	Scale											
	TI		TO		Es		Co		Au		RO	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Engineering	21.8	8.6	21.2	4.8	8.6	4.5	14.2	4.6	25.8	7.9	14.0	4.8
Physical science	23.8	8.8	23.0	5.4	10.1	5.3	16.1	5.7	27.3	7.2	15.0	5.9
Biological science	23.6	8.0	21.3	5.6	10.4	5.1	15.0	5.7	25.6	7.4	13.8	5.7
Social science	23.9	8.9	19.6	5.5	10.5	5.1	15.0	5.9	27.6	7.2	15.7	5.6
Humanities	32.1	7.3	22.5	4.9	15.7	5.5	19.9	6.0	31.5	7.8	16.0	6.9
Fine arts	27.9	8.2	20.6	5.8	16.0	4.9	17.0	6.6	28.6	7.4	13.6	6.4
Agriculture	18.8	6.8	17.8	5.0	6.1	3.2	11.3	2.3	23.1	7.2	13.1	5.0
Undecided	23.9	7.8	20.1	5.7	10.1	6.0	15.6	5.7	28.7	7.2	14.8	5.2

[a] Includes Davis, Los Angeles, and Santa Barbara

Appendix E (Continued)

Table E-3

Raw Score Means and Standard Deviations of Non-Intellective Scales of the Omnibus Personality Inventory, Form F, for Male Freshmen at Three University of California Campuses[a] by Academic Major

Major	Scale															
	SE		IE		PI		AL		Am		PO		MF		RB	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Engineering	19.2	6.3	31.5	9.8	30.1	10.9	13.7	4.1	17.3	6.5	15.9	5.5	36.0	4.9	13.2	3.5
Physical science	21.5	7.7	31.1	9.8	35.4	10.4	14.2	4.4	18.4	6.0	13.7	6.1	35.3	5.4	14.8	4.2
Biological science	21.9	7.7	31.1	9.3	33.3	10.2	13.5	4.7	19.0	5.7	14.2	5.9	34.0	5.1	14.1	4.2
Social science	22.7	6.3	33.3	10.4	32.8	10.0	13.1	4.5	18.9	5.7	14.2	6.0	33.0	5.2	12.4	4.3
Humanities	21.5	7.7	33.5	9.1	32.8	11.4	12.4	4.2	21.4	5.8	10.0	5.5	29.1	5.6	13.9	3.5
Fine arts	17.3	7.6	33.8	11.1	30.7	12.8	12.2	4.4	16.9	4.3	12.3	5.8	29.4	6.2	13.0	3.0
Agriculture	21.4	7.7	28.9	9.9	36.4	9.3	14.8	3.8	18.4	5.5	17.7	5.6	37.3	5.8	13.6	4.4
Undecided	19.5	7.4	31.2	11.3	32.4	11.0	13.0	5.0	19.1	6.6	12.9	5.1	33.2	7.1	12.5	4.2

[a] Includes Davis, Los Angeles, and Santa Barbara.

Appendix E (Continued)

Table E-4

Raw Score Means and Standard Deviations of Intellective Scales of the Omnibus Personality Inventory, Form F, for Female Freshmen at Three University of California Campuses[a] by Academic Major

Major	Scale											
	TI		TO		Es		Co		Au		RO	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Physical science	22.4	7.9	19.5	5.7	10.9	4.5	12.9	5.2	23.4	6.5	12.4	5.5
Biological science	24.7	7.9	20.4	5.1	12.2	5.2	15.1	5.1	25.8	7.3	14.5	5.7
Social science	24.6	8.4	17.0	5.7	12.9	5.0	14.3	6.1	25.9	7.5	13.5	5.1
Humanities	26.1	8.2	16.6	5.6	13.7	4.6	14.4	6.2	27.1	7.5	13.8	5.4
Fine arts	27.6	7.9	18.0	5.3	17.0	4.5	17.5	7.0	28.1	7.7	14.6	4.8
Agriculture	19.7	7.2	15.1	4.8	10.1	4.8	11.5	4.0	21.8	6.7	11.6	4.7
Undecided	21.6	8.1	16.2	5.8	12.0	5.1	13.9	6.5	26.3	7.0	15.0	5.1

[a] Includes Davis, Los Angeles, and Santa Barbara.

Appendix E (Continued)

Table E-5

Raw Score Means and Standard Deviations of Non-Intellective Scales of the Omnibus Personality Inventory, Form F, for Female Freshmen at Three University of California Campuses[a] by Academic Major

Major	Scale															
	SE		IE		PI		AL		Am		PO		MF		RB	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Physical science	22.6	7.3	22.6	8.1	32.8	10.3	12.7	4.2	21.8	5.4	15.3	4.6	26.7	5.4	13.9	4.4
Biological science	23.3	6.7	24.3	11.1	34.7	8.7	13.9	3.6	22.7	4.8	12.9	4.5	27.8	5.5	14.7	3.9
Social science	23.9	7.2	26.0	9.9	33.4	10.6	13.2	4.2	22.9	5.2	13.6	5.6	24.6	5.2	12.5	4.2
Humanities	23.0	7.6	25.8	9.9	32.2	10.0	12.5	4.3	22.7	5.1	12.5	5.4	22.7	4.9	12.0	3.7
Fine arts	23.1	7.5	29.3	11.9	32.9	9.0	13.3	4.2	22.4	5.7	11.5	4.9	23.8	4.0	12.8	3.6
Agriculture	24.4	6.6	21.4	8.6	35.9	10.8	14.1	4.1	21.9	5.2	16.2	4.5	27.7	5.8	12.8	4.7
Undecided	22.9	7.3	25.3	11.3	33.2	10.5	13.3	4.9	22.0	5.5	13.6	4.7	25.1	4.0	11.5	4.3

[a] Includes Davis, Los Angeles, and Santa Barbara.

APPENDIX F

BASIC DATA ON ENROLLMENT RELATING TO THREE MAJOR HYPOTHESES AND WITHDRAWAL PATTERNS

Group			Male			Female		
			Total freshman	Enrolled spring	Enrolled fall	Total freshman	Enrolled spring	Enrolled fall
Ability	IDC	Cell	Davis					
High	High	1	19	15	12	14	12	6
Average	High	2	9	4	5	8	5	4
Low	High	3	1	0	0	7	5	5
High	Average	4	21	19	14	9	6	3
Average	Average	5	53	40	29	74	54	43
Low	Average	6	9	8	5	18	9	4
High	Low	7	10	9	8	3	3	1
Average	Low	8	16	12	13	11	8	7
Low	Low	9	15	5	5	34	20	17
		Total	153	112	91	178	122	90

Appendix F (Continued)

Basic Data on Enrollment Relating to Three Major Hypotheses and Withdrawal Patterns

				Male			Female	
	Group		Total freshman	Enrolled spring	Enrolled fall	Total freshman	Enrolled spring	Enrolled fall
Ability	IDC	Cell			Los Angeles			
High	High	1	51	35	35	33	23	19
Average	High	2	13	8	9	11	5	5
Low	High	3	0	0	0	7	4	5
High	Average	4	22	15	15	12	9	10
Average	Average	5	85	60	57	98	70	62
Low	Average	6	17	11	11	23	17	14
High	Low	7	3	3	3	10	9	7
Average	Low	8	18	13	13	15	12	12
Low	Low	9	29	14	14	41	31	26
		Total	238	159	157	250	180	160

Appendix F (Continued)

Basic Data on Enrollment Relating to Three Major Hypotheses and Withdrawal Patterns

			Male			Female		
	Group		Total freshman	Enrolled spring	Enrolled fall	Total freshman	Enrolled spring	Enrolled fall
Ability	IDC	Cell			Santa Barbara			
High	High	1	43	29	24	18	12	8
Average	High	2	7	6	6	15	9	7
Low	High	3	1	1	1	8	4	2
High	Average	4	26	21	21	27	19	17
Average	Average	5	93	73	66	146	100	85
Low	Average	6	6	5	4	35	22	17
High	Low	7	26	18	18	9	4	3
Average	Low	8	25	16	14	34	22	19
Low	Low	9	22	11	7	71	41	29
	Total		249	180	161	363	233	187

APPENDIX G

CAMPUS CHARACTERISTICS OR COLLEGE GOALS RATED AS SATISFACTORY BY MORE THAN THREE-QUARTERS OR LESS THAN ONE-QUARTER OF SAMPLE, BY INTELLECTUAL DISPOSITION CATEGORY

Figure G-1

High Intellectual Disposition

At Least Three-Quarters of Davis Sample

Course work overall
Self-discovery, self-insight
Academic standards
Warmth and friendliness of the students

At Least Three-Quarters of Davis Persisters

Course work in major
Being exposed to ideas which will result in having a more comprehensive world view

At Least Three-Quarters of Davis Nonpersisters

"Bull-sessions" with fellow students
Individual artistic or literary work
Furthering my appreciation of cultural and esthetic heritage

At Most One-Quarter of Davis Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Most One-Quarter of Davis Nonpersisters

Amount of memory work involved in courses
Preparing me to be more effective in a chosen occupation

At Least Three-Quarters of Los Angeles Sample

Access to cultural offerings
Diversity among students in views, background, etc.
Furthering my appreciation of cultural and esthetic heritage
Increasing my understanding of people with backgrounds and/or values different from my own

At Least Three-Quarters of Los Angeles Nonpersisters

Course work in major
Self-insight, self-discovery
Academic standards
Tolerance for divergent views, dress, behavior

At Most One-Quarter of Los Angeles Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Most One-Quarter of Los Angeles Nonpersisters

Amount of memory work involved in courses

At Least Three-Quarters of Santa Barbara Sample

Course work overall
Course work in major
"Bull-sessions" with fellow students
Self-insight, self-discovery

At Least Three-Quarters of Santa Barbara Persisters

Being exposed to ideas which will result in having a more comprehensive world view

At Least Three-Quarters of Santa Barbara Nonpersisters

Being challenged to critically re-examine my basic beliefs

At Most One-Quarter of Santa Barbara Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Most One-Quarter of Santa Barbara Nonpersisters

Intellectual or scholarly commitment of most students
Seriousness with which studies are taken
Amount of memory work involved in courses

Figure G-2

Average Intellectual Disposition

At Least Three-Quarters of Davis Sample

"Bull-sessions" with fellow students
Self-discovery,self-insight
Course work overall
Course work in major
Academic standards
Warmth and friendliness of the students

At Least Three-Quarters of Davis Persisters

Increasing my understanding of people with backgrounds and/or values different from my own
Being exposed to ideas which will result in having a more comprehensive world view

At Least Three-Quarters of Los Angeles Sample

Diversity among students in views, background, etc.
Increasing my understanding of people with backgrounds and/or values different from my own
Tolerance for divergent views, dress, behavior
Course work overall
Course work in major
Academic standards
Access to cultural offerings

At Least Three-Quarters of Los Angeles Persisters

Self-discovery, self-insight
Being exposed to ideas which will result in having a more comprehensive world view

At Most One-Quarter of Los Angeles Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Least Three-Quarters of Santa Barbara Sample

Course work overall

At Least Three-Quarters of Santa Barbara Persisters

"Bull-sessions" with fellow students
Self-discovery, self-insight
Being exposed to ideas which will result in having a more comprehensive world view
Furthering my appreciation of cultural and esthetic heritage
Increasing my understanding of people with backgrounds and/or values different from my own
Tolerance for divergent views, dress, behavior
Being challenged to critically re-examine my basic beliefs
Course work in major
Academic standards

At Most One-Quarter of Santa Barbara Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

Figure G-3

Low Intellectual Disposition

At Least Three-Quarters of Davis Sample

"Bull-sessions" with fellow students
Increasing my understanding of people with backgrounds and/or values different from my own
Seriousness with which studies are taken
Course work overall
Course work in major
Academic standards
Warmth and friendliness of the students

At Least Three-Quarters of Davis Persisters

Preparing me to be more effective in a chosen occupation

At Least Three-Quarters of Davis Nonpersisters

Tolerance for divergent views, dress, behavior
Availability of quiet and/or privacy for study, contemplation
Lower division courses

At Most One-Quarter of Davis Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Most One-Quarter of Davis Persisters

Individual artistic or literary work

At Least Three-Quarters of Los Angeles Sample

Diversity among students in views, background, etc.
Tolerance for or openmindedness regarding divergent views, dress, behavior
Course work overall
Course work in major
Academic standards
Access to cultural offerings

At Least Three-Quarters of Los Angeles Nonpersisters

Lower division courses

At Most One-Quarter of Los Angeles Sample

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake

At Most One-Quarter of Los Angeles Persisters

Individual artistic or literary work

At Most One-Quarter of Los Angeles Nonpersisters

Acquaintance with the faculty

At Least Three-Quarters of Santa Barbara Sample

"Bull-sessions" with fellow students
Tolerance for or openmindedness regarding divergent views, dress, behavior
Course work overall
Course work in major
Academic standards

At Least Three-Quarters of Santa Barbara Persisters

Self-discovery, self-insight
Warmth and friendliness of the students

At Least Three-Quarters of Santa Barbara Nonpersisters

Increasing my understanding of people with backgrounds and/or values different than my own
Being challenged to critically re-examine my basic beliefs
Lower division courses

At Most One-Quarter of Santa Barbara Persisters

Balance of concern over grades and passing exams vs. genuine interest in learning for its own sake
Individual artistic or literary work
Developing a scientific approach to problem solving

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